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Addresses.

BENJAMIN RUSH.

AN ADDRESS DELIVERED AT THE UNVEILING OF A MONUMENT ERECTED BY THE AMERICAN MEDICAL ASSOCIATION TO THE MEMORY OF BENJAMIN RUSH IN WASHINGTON, D. C., JUNE 11, 1904.

J. C. WILSON, A.M., M.D.

PHILADELPHIA.

Mr. President, Members of the American Medical Association, and Honored Guests:

It is proper for me to express my appreciation of the high honor which you, through your officers, have conferred on me in delegating to me the duty of addressing you on this occasion. The sentiment of elation which I might otherwise feel is tempered by a lively sense of my unworthiness for the task. It is, however, a satisfaction to find myself associated in the work of thus commemorating the life and labors of the most distinguished of American physicians with Mr. Perry, the sculptor, to whose talent we owe the beautiful and lifelike statue, and with Mr. Metcalfe, the designer of the pedestal on which it rests.

More than twenty years have elapsed since the Rush Monument Committee was appointed. Of its original members, Gihon, Henry M. Smith, Kinloch, Gordon, Rohé, Murphy, Toner, and Henry, all but one have gone over to the majority. S. C. Gordon of Maine alone remains.

At no time in its long existence has the committee lacked energy or insistance; but at the close of its labors the monument is on a scale far less commanding than that which those who conceived the plan first had in mind. To those on whom at the last rested the decision between longer waiting and present casting of the molten metal, the fact that our statue is no colossus does not seem a fault.

Nearly a century has passed since Benjamin Rush was gathered to his fathers. To his contemporaries he was a man not unlike other men, having his virtues and his faults, a good citizen, a skillful physician, kindly, courteous, benevolent, and having on occasion much fight in him. He was even known to have some fame in distant lands, chiefly because of a wonderful, clear narrative of the bilious yellow fever of 1793 which he had written. To us, who see him through the vista of one hundred years, he stands, not, indeed, the most conspicuous figure of a time brilliant with heroic men and deeds, but great among the greatest, and certainly the most striking and impressive figure of the medical life of America at that period or any period since.

The story of his life is a familiar one.

Benjamin Rush was born Dec. 24, 1745, old style, and died April 19, 1813. He came of yeoman stock. For four generations his paternal ancestors, descendants of John Rush, who had been captain of a troop of horse under Oliver Cromwell, and had followed William Penn to Pennsylvania in 1683, had been colonists. The family settled in Byberry Township, thirteen miles northeast of Philadelphia, and lived and died as farmers. It is said that his father and grandfather were also gunsmiths. It was here that Benjamin Rush was born.

Little is known of his boyhood. He left Byberry on the death of his father and came, at the age of six, with his mother and her other children to Philadelphia. Three years later he was taken by his uncle, the Rev. Dr. Samuel Finley, afterward President of Princeton College, as a pupil in the academy over which he presided at Nottingham, Southern Maryland. Here he spent five years, studying hard, acquiring a good knowledge of the Greek and Latin classics and a fine facility in the use of his mother tongue. At the age of fourteen he was sent to college at Princeton, from which institution he was graduated a Bachelor of Arts at the following commencement, 1760, being still in his fifteenth year.

Under the influence of Dr. Finley he was put to study medicine with Dr. Redman, in Philadelphia. Here he remained six years. During this period he had unusual opportunities for the study of his chosen profession. As a pupil he was most diligent and studious. Among other things, he translated the Aphorisms of Hippocrates into English, and made extensive notes of a circumscribed epidemic of yellow fever, which prevailed in the lower part of Philadelphia, along the shore of the Delaware, in 1762.

It was at this time that he began the habit of keeping a diary, which he continued through life. Some of these volumes, unfortunately much mutilated, are now in the possession of the Philadelphia Library.

At the age of twenty-one Rush went to Europe and spent two years in Edinburgh under Cullen, with whom he became a great favorite. He was graduated at the Medical School in 1768, and defended the thesis, "De Concoctione Ciborum in Ventriculo."

Shortly after obtaining his degree he went to London, where he spent several months in attending lectures, visiting the hospitals, and in other work of a professional nature. Benjamin Franklin, then in London, took a warm interest in the welfare of the young physician. Through him he made the acquaintance of many prominent persons, especially in his own profession, and it was through his influence and by means which he furnished that Rush went to Paris for a short time.

While abroad he had given much attention to chemistry, and on his return he was at once elected to the chair of chemistry of the College of Philadelphia, at that time fortunately vacant. His success as a teacher was quickly established. At the same time he sought with equal success to make himself known as a practitioner.

Even at this early period of his career he manifested great interest in political affairs. His leisure hours were devoted to the cause of the abolition of slavery in the colonies, to the advocacy of temperance, and to the promulgation of a knowledge of public and personal hygiene. He gave popular lectures on these subjects and wrote much for the newspapers. He became an active member of the American Philosophical Society, having been elected in 1768, and filled successively the offices of curator, secretary, curator, and vice-president without interruption from 1770 to 1801. On several occasions he delivered formal addresses before that body. The first of these papers, and one of the earliest and most important of Rush's publications, was "An Inquiry into the Natural History of Medicine Among the Indians of North America, with a Comparative View of Their Diseases and Remedies with Those of Civilised Nations." This address, delivered in 1774, when Rush was but twenty-nine years old, was a masterpiece of close observation, mature thought, and clear reasoning. It contains a most important collection of facts relating to the red men of that period, and many sage observations concerning the effects of exercise, fresh air, and cold water on the health, and as curative agents.

Rush took an active part in the politics of the stirring period which led up to the Revolution. He was a member of the Provincial Conference of Pennsylvania, and, with James Smith, served on a committee to consider and report on the question as to the expediency of the declaration of independence by Congress. The report of this committee, which is generally attributed to the pen of Rush, contained much that was incorporated into the Declaration, and urged that measure with great force. He subsequently became a member of the Continental Congress, in which he served nearly seven months, becoming one of the signers of the Declaration of Independence, which had been adopted prior to his election.

In January, 1776, he married Julia, daughter of the Hon. Richard Stockton of New Jersey. Of this union there were many children. He was then thirty-one years old. The same year he was appointed Surgeon-General of the Middle Department, under Shippen. The following year his title was changed to that of Physician-General. Two years later he resigned from the service.

From this period his life was that of the practitioner, teacher, and writer—a life of marvelous activity and influence. He was elected a member of the medical staff of the Pennsylvania Hospital in 1783, and continued in the service of that institution until his death, a period of thirty years. He was one of the founders of the College of Physicians of Philadelphia, and his name appears in the list of the Senior Fellows published with the constitution of the College in the *Pennsylvania Packet and Daily Advertiser*, Feb. 1, 1787. Having been an active fellow of the college from its foundation, he tendered his resignation in a brief note, accompanied with the gift of a copy of Wallis' edition of the works of Sydenham, on Nov. 5, 1793. His resignation was accepted and the secretary directed to thank him for the gift of books.

During the period that Philadelphia was occupied by the British medical teaching was abandoned, but about the time of Rush's return it was resumed, and the Medical School was reopened in 1778. In 1781 Rush was lecturing on chemistry in the new University School. Two years later he became professor of chemistry in the old college, a position which he held until, on the death of Morgan, in 1789, he succeeded to the chair of the theory and practice of medicine. At length, in 1791, when the two schools were united in the Medical Department of the University of Pennsylvania, he was elected to the chair of the institutes of medicine and clinical medicine. When Kuhn resigned the chair of practice, in 1797, Rush undertook the duties of that position in addition to his previous work, and was formally elected to the professorship in 1805. He continued to deliver the lectures on the institutes and practice and to hold the medical clinics until his death.

With all his absorbing and time-consuming professional work, Rush maintained his interest in public affairs. He was resident Port Physician, 1790-1795; a member of the Convention of Pennsylvania for the Adoption of the Federal Constitution in 1787, and was appointed by the President, John Adams, Treasurer of the United States Mint in 1799, an office which he held until his death, fourteen years later, and in which he was succeeded by his son. He died April 19, 1813, after an illness of four days—probably pneumonia. According to a correspondent of Lettsom, the fatal disease was typhus fever.

The end found him, at the age of sixty-eight, devoted as always to the welfare of his fellows, healing the sick, teaching, absorbed in public affairs, busy with his pen. In the warfare against vice, ignorance, and disease he died as he had lived—on the firing line. Hosack tells us that his last deed was an act of charity, and his last words the injunction to his son to "Be indulgent to the poor."

> Nothing is here for tears, nothing to wail
> Or knock the breast; no weakness, no contempt,
> Dispraise or blame; nothing but well and fair,
> And what may quiet us.

His death created a profound impression not only in Philadelphia, but throughout the United States. His numerous writings had made him known on both sides of the Atlantic. In his own country his students and private pupils numbered thousands, and had carried with them to every state in the Union a sense of personal regard and friendship such as is given to few teachers to arouse. He was a really great practitioner, and those who had been his patients were scattered throughout the land. He was one of the few surviving signers of the Declaration of Independence, the close personal friend of many public men, among them Jefferson and Adams, and had himself served his state and country in many offices, and served them well. He was essentially a man of the people, and was as widely loved as he was widely known. His death, coming quickly as it did, caused deep and widespread grief, and he was universally and sincerely mourned.

In person Dr. Rush was above the medium height and slender. His features were strongly marked; his nose aquiline; his eyes bright and piercing; his mouth sensitive and full of expression; his countenance at once animated and dignified, as shown by the portrait by Sully in the Pennsylvania Hospital. His manners were courteous and affable, and there was in his demeanor a charm that won to an unusual degree the admiration and regard of those with whom he came in contact. His voice was most agreeable; he excelled in conversation and was a gifted and pursuasive orator. As a teacher he was singularly sympathetic and impressive. His success in these particulars was, however, not so much due to his personal gifts as to a lively imagination, a well-stored and highly cultivated mind, and a most retentive memory. His industry was prodigious. Work was his recreation. In all things he economized time by the most

systematic use of it. His energy and capacity for work were the more remarkable in view of his rather delicate health in early manhood. At the conclusion of his essay on the Treatment of Pulmonary Consumption, he states that he had derived from his paternal ancestors a predisposition to that disease, and that between the eighteenth and forty-third years of his life he had occasionally been troubled with many of its symptoms. After this period his health improved, and toward the close of his life he frequently alluded to his excellent health, which he attributed to systematic work, regular habits of living, and temperance.

Rush was in the highest sense a man of affairs and a scholar. No subject of general interest escaped his notice or failed to arouse his attention. He was an omnivorous reader and made voluminous notes, not only of passing events, but also of the suggestions and comments on them which arose in his mind. As a thinker he was far in advance of his time, advocating civil and religious liberty, temperance, the abolition of slavery, the establishment of free schools, the higher education of women, the proper care of the insane, and international arbitration as a means to universal peace. Lettsom held that "a long and willing abode amidst stupendous mountains, boundless forests, expansive lakes, a pregnant and extensive soil, and a climate suitable to a rich cultivation is incompatible with servility of mind and dependence of condition," and attributed to these physical causes the political agitation of the colonists and the energy, fecundity and luminous action of spirits such as that of Rush. Nor were the teeming thoughts lost on the air; not only were they penned in his note-books, but also on the printed page. He was a constant writer, and throughout his pages the scientific spirit, wise judgment, lofty patriotism, devotion to mankind and deep religious feeling are everywhere apparent.

Yet he had his bitter foes. There were many who ardently hated him in life; there are those who magnify his faults now that he has been so long dead.

One medical historian* tells us that "in spite of his general benevolence he was dogmatic, impatient of contradiction, and often unreasonably resentful."

Does this writer forget David and the imprecatory Psalms?—

Consume them in wrath, consume them.

Or:

Let their habitation be desolate, and let none dwell in their tents.

Even the righteous can call down vengeance on their enemies.

But Rush does not appear to have sought quarrels or to have invoked the vengeance of heaven on his foes. Tenacious of his own opinions, he was not very tolerant of those who opposed him. He thought that much harm was done by the French physicians and his colleagues who treated the yellow fever with bark, wine and cold baths, and attributed at least two-thirds of the deaths in the epidemic of 1793 to such errors in treatment, an opinion in which the modern critic can not concur. But he felt that he was the injured one in the controversies concerning bleeding and *ten and ten*.

In fact, he states, in a letter to his wife dated Oct. 24, 1793, that he "was publicly accused at every corner of having murdered the greatest part of the citizens who have died of the present disorder." In the same letter he speaks of going to New York and ending his days there rather than continuing in Philadelphia, where he saw nothing before him but strife and misery. Such was his discouragement at a time when he felt that he was making every sacrifice for his fellow-townsmen, even to the risk of life itself, and that he had discovered for them the only treatment for the disease of which they were dying by hundreds. In truth, it was Dr. Rush's plan to shun rather than to seek controversy. Within ten days of the date of the letter just referred to, he resigned from the College of Physicians of which nearly seven years before he had been one of the founders, because, according to Caldwell, of the abuse and persecution he had sustained from that body on account of his treatment of the epidemic disease by blood-letting and calomel. Some conflict of opinion on college affairs with the Rev. Dr. John Ewing, who was provost, led him to sever his membership with the Presbyterian Church of which Dr. Ewing was the minister. In this trait of character lies the explanation of the one difficult episode in Rush's career, his resignation of the office of Physician-General to the Army. This occurred in February, 1778, the terrible winter of Valley Forge. To the careful student of his life this act, which has been severely criticised, is perfectly intelligible. Worn out physically with the hardships of the service and thoroughly discouraged with political conditions, which appeared to him hopeless, he turned from a state of affairs in which he was useless, and, abandoning public life, resumed a career in which, as a private citizen practicing and teaching his profession, he was able to be of real service to his fellowmen. If, for a time, misled by an error of judgment, he listened to those who sought to gratify their personal ambition by changes in public policy or in the administration of the government, the delusion was of short duration.

Personal dislikes he had, like all men of strong nature, but that he lacked patriotism his whole career and his writings everywhere abundantly disprove. It is easier for us than for his contemporaries to realize how great was this error in judgment. That it was forgiven and forgotten during his life, leads the candid historian to believe that it may be condoned by a later generation. One thing about Rush that endears him to humanity is that he was intensely human. His most ardent panegyrist has not yet sought to endow him with superhuman qualities.

There is another side to the picture. Those who knew him best, best knew how to praise him.

Ninety-one years ago, almost to the day, Dr. David Ramsey, at the request of the Medical Society of South Carolina, delivered, in the Circular Church in Charleston, "An Eulogium Upon Benjamin Rush." The Society, on hearing of the death of Benjamin Rush, impressed with a high respect for his memory, resolved to go in mourning on the melancholy occasion. He had been the preceptor of sixty of its members, and Dr. Ramsey addressed an audience who knew Rush personally and closely. This discourse, which contains much information concerning Rush's life and attainments, has served as a source of many of the biographical sketches. It is dignified and temperate, but in the highest respect a tribute of affection and regard. He dwells on Rush's simple habits, his industry, his scientific spirit, his unselfish patriotism, his sincere piety. He lays proper stress on the part played by Rush in the founding of Dickinson College, "of which he may be called the father," and his founding of the Philadelphia Dispensary. In a word, Ramsey's address is in the highest sense a eulogium.

A few months later Dr. David Hosack of New York, in

* Ruschenberger.

an introductory discourse, paid a tribute to the memory of the late Benjamin Rush in similar terms. This tribute lays especial stress on his charm of manner and the gracefulness of his conversation, adding that "few persons ever left his society without receiving instruction and expressing their astonishment at the perpetual stream of eloquence in which his thoughts were communicated."

Hear also Meigs in his charming reminiscences of the men who have served the Pennsylvania Hospital:

"We esteem the greatest name of the men who, in that now somewhat distant day, served in the Pennsylvania Hospital, was the name of Benjamin Rush, professor of the practice of medicine in the University of Pennsylvania.

"That eminent physician's renown was not founded alone on his grand career in the fatal epidemic of 1793, or in like occurrences in years following. It depended more on his surpassing and most captivating eloquence, on his great wisdom, his learning, and the inextinguishable zeal whose fire was not in the least assuaged at the time we attended on his last course of lectures, at that venerable and beautiful old age, which soon afterward let him down into an honored grave.

"May we not stop a moment just here, to express the wish and the hope that ere many years shall have elapsed the statue of that eminent American may find its appropriate plinth in some conspicuous part of the town whose very name is signally honored by his whole life and conversation."

Zimmerman wrote to Lettsom that Rush merited a statue not only from Philadelphia, but from all humanity.

His fame was such that he was honored with membership in nearly every medical and scientific society in his own country, and distinguished by many honors from similar organizations in Europe. He was created LL.D. by Yale College.

As a mark of respect for his medical character and writings, and especially for his accounts of the yellow fever, he received from the King of Prussia a medal; from the Queen of Etruria a gold medal; from the Emperor of Russia a costly diamond ring, and the thanks of the King of Spain. Two medals were struck in his honor at the United States Mint, of which he was so many years the treasurer. They have been described by Storer, from originals in his own collection. They have the same date, A(nno) MDCCCVIII, and are exceedingly rare.

Nearly a century has elapsed, and we, too, come to do his memory an honor long deferred. This monument, the gift of the profession, of which he was so illustrious a fellow, to the nation whose greatness he foresaw and predicted, bears on its pedestal four legends, commemorative of his learning, his patriotism, his sagacity as a specialist, and his greatness as a physician and as a man.

Let us consider briefly each in turn.

"Studium sine calamo somnium"—"to study without the pen is to dream." Dr. Samuel Finley, of the West Nottingham Grammar School and later the President of Princeton College, was an excellent scholar and eminent teacher. Under his tuition and guidance Rush, as a lad, acquired the knowledge of classical literature and habits of study and observation which he continued to cultivate throughout life. During his brief stay at Princeton he was distinguished for his talents, his progress in his studies, and his eloquence as a speaker. His translation of the Aphorisms of Hippocrates into English while a student in Dr. Redman's office was evidence at once of his love of letters and his love of medicine. The literary habits early formed and always adhered to were in the highest degree methodical. His commonplace books were daily records of occurrences and comments on them. It was his practice in reading to mark any important fact or peculiar expression for future reference. He was a great annotator, and, like Gibbon, "he investigated with his pen always in his hand." Ramsey said of him: "He read much, but he thought more. His mind was constantly engrossed with at least one literary inquiry to which he devoted his undivided attention. To make himself master of that subject he read, he meditated, he conversed." He was much given to collateral reading, thus approaching the immediate subject of his thoughts from many different points of view. He entertained the quaint opinion that "ideas, whether acquired from books or by reflection, produce a plethora in the mind which can only be relieved by depletion from the pen or tongue"—an opinion entirely in harmony with his views concerning pathology.

His style is simple, lucid, direct. He is always concerned with the matter in hand rather than with the manner of presenting it. Now and then he is betrayed by the liveliness of his imagination into an odd or unusual expression, but with few exceptions his writings are dignified and graceful. They abound with an amiable egotism, more becoming in great than in little men, to which they owe in part the personal charm and interest which his readers experience. In many respects the style of Rush compares most favorably with the best medical writings of his own or any subsequent period. To read one of his books arouses an interest that does not cease when all have been read. To come on the "Medical Inquiries and Observations" for the first time is to experience a feeling akin to that of Keats on reading Chapman's Homer:

> Then felt I like some searcher of the skies
> When a new planet swims into his ken.

The "Account of the Bilious Yellow Fever, as it appeared in Philadelphia in 1793," has been called the best history that was ever written of an epidemic. It attracted immediate attention throughout Europe, and was translated into three languages. His writings were numerous, and embraced nearly every subject of contemporaneous interest. Nothing but a faculty for close and accurate observation, the widest human sympathy and a sense of the importance of securing the largest audience for views which to him were of paramount importance could justify his addressing the public on such a diversity of subjects.

Samuel Jackson gives a list of Rush's publications arranged in four categories, and showing the state in which they were originally found in the book stores. They comprise: 1. Medical Inquiries and Observations, the Histories of the Yellow Fever Epidemics in Philadelphia, and other subjects purely medical. 2. The Introductory Lectures, of which there are sixteen; Medical Inquiries and Observations on Diseases of the Mind, and American Editions of Sydenham and other standard medical works, with annotations. 3. Essays, literary, moral, and philosophical, originally communicated to the periodicals of the day and subsequently collected and published in two volumes. 4. His political writings.

When we reflect that Rush was at every period of his life engaged in arduous and unsparing pursuits, holding public office, seeing many patients as practitioner and consultant, spending long hours in the Pennsylvania Hospital, bound by the fixed hours of the teacher, we marvel alike at the extraordinary range of his literary

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work, and even more at its abundance. He did the work of several men, and he did it well. What we call pleasure had no charm for him; of relaxation he had no need. His energy was indefatigable and his power of concentration phenomenal. His time was all his own, and he made the best use of it.

As a signer of the Declaration of Independence, we may well be proud of him. He had done much work in preparing the way for it, and was even more radical than his friends in urging its adoption. None knew better than he the stupendous responsibility of that utterance. There stands his name between the names of Robert Morris and Benjamin Franklin, a perpetual witness to his courage and patriotism. The parchment was engrossed before he was elected to the Congress, and, as Jackson says, he did not sign it because he was a member; he became a member in order that he might sign it.

The first American alienist, Mills, makes the statement that Rush and Ray are the two Americans who have done most for psychiatry, and adds that, valuable as more recent writings on the subject have been, and whatever the future may bring forth, these two are not likely soon to be displaced as the most striking figures in American psychologic medicine. Rush was no specialist in the modern sense in which we use this word. With him every branch of medicine was for the time being a specialty. His methods of study, and the limited range of medicine in his day made this possible, and hygiene, military medicine, the fevers, diseases of the chest, diseases of children, therapeutics, climatology, and epidemiology engaged his attention in turn, and became the subject of special communications to his fellow-practitioners and the public at large. As he grew older the subject of lunacy and the proper treatment of the insane more and more engaged his thoughts. His well-known letter to the managers of the Pennsylvania Hospital against confining the lunatics in cells was written in 1789; his carefully prepared communication suggesting many improvements in their treatment, in 1810; his Medical Inquiry and Observations on Diseases of the Mind first appeared in 1812, a few months before his death. This treatise is full of instruction and originality, and owes much of its value to facts and cases drawn from the author's own experience. He recognizes the physical, mental and moral causes of insanity, exhibits its many forms and phases by the graphic relation of cases, gives an ingenious and original classification of insanity, elaborates the principles of diagnosis and prognosis, and enlarges on its management and treatment. He regarded disorders of the mind as forming part of the general course of medicine, and, as indicated in a published syllabus, insisted on their being placed in the curriculum—a plan long neglected in the medical schools, but now being generally adopted. He was also nearly a century in advance of his time in suggesting detached cottages for the care of convalescents. He also advocated the founding of institutions for the care of dipsomaniacs. As a specialist in diseases of the mind, Dr. Rush forms a remarkable and most impressive historical figure.

As a physician and philanthropist Dr. Rush occupied during his life the central place on the stage of American medicine. Nor has the flight of time altered his position. It is no disparagement to any of his successors to repeat that in the history of American medicine he still holds that conspicuous position.

As a physician he was all that the best education of his day, the finest personal traits, a noble character, an exhaustless energy, ability of the highest order, and a child-like piety and faith could make him. We can not measure his practice by ours, for old things have passed away and all things have become new. But we must grant him the courage of his convictions. If his premises had been true—alas! the if—his conclusions would have been inevitable and his practice logically correct. The Defence of Blood-letting makes us shudder. To him the facts amounted to a demonstration of the curative power of that sanguinary measure; to us they only show the enormous resistance of certain organisms to depletion. His therapeutic optimism was incredible. It was based on a pathologic system that was as fantastic as it was misleading. Groping in the dark, he struggled toward the light. The traditions misled him, but his own powers of observation set his feet on the right way. He was the father of experimental medicine in America. Witness the experiments on which his thesis was based and the curious investigations in regard to the action of certain substances on worms. There was in him something of that prescience that belongs to genius. He was led by a consideration of the accounts of the "exemption from the pains of child-bearing that are recorded of the women in the Brazils, Calabria, and some parts of Africa, and the small degrees of it which are felt by the Turkish women. . . . to believe that pain does not accompany child-bearing by an immutable decree of Heaven," and expressed a hope "that a medicine would be discovered that should suspend sensibility altogether and leave irritability or the power of motion unimpaired, and thereby destroy labor-pains altogether." The reasonableness of this hope, based as it was on moral evidence, was such that it amounted to faith. He approached the subject in a spirit of profound reverence, on account of the authority on which the popular notion of the penal character of the travail of childbirth, including of necessity physical pain, was supposed to rest. His attitude in this matter showed courageous disregard of ecclesiastical and popular opinion, the most profound human sympathy, and prophetic vision in anticipating by nearly fifty years general anesthesia in parturition.

If we wish to know what he was as a practitioner, let us turn to the "Old Family Letters"* written to his wife during the awful epidemic of 1793. They are too sacred to be published even after all these years. They show us the man, Rush, tender, gentle, broken-hearted at the awful calamity that had befallen his people; the physician, quick to go to the relief of rich and poor alike, fighting a losing fight with his wretched lancet and ten and ten, and never faltering because of the faith that was in him, inspiring the citizens, firing his pupils, though they died, and winning back his deserting colleagues; the hero, who would not, come what may, desert his post.

When the published account of that fearful period became known "all Europe was astonished at his novelty and bold decision, his unprecedented sagacity and judgment." The older among us have had some experience in skirmishes against epidemic diseases. Think of the heroism of the leader in a great fight like that in Philadelphia in 1793! And the fever! It is all very simple now, looking back on it from the vantage-ground of recent years. But the awful mystery and horror of it then!

After what has been said, is it necessary to speak of philanthropy? Is not his love of his fellow-men set forth in every word that I have spoken of him, on every page that he wrote? Rush has been compared with the great men in medicine. He has been called the American Hippocrates, the American Sydenham, and likened to Fothergill and to Boerhaave, the great teacher of Leyden.

* Privately printed.

None of these comparisons is fair to him. He was great in his own right. Richardson calls him "one of the most original and powerful men whom medicine has ever claimed for a son." He was the first Great American Physician.

To you, Honored Representative of the Nation, I, for the moment the representative of the medical profession, present this monument. Accept it as a token of the good will of our guild toward your people, our brothers, and as an enduring memorial of one who exemplifies in an unusual degree the ancient maxim, *"Dii laboribus omnia vendunt."*

THE DEVELOPMENTAL DEFECTS OF THE SKIN AND THEIR MALIGNANT GROWTHS.

CHAIRMAN'S ADDRESS BEFORE THE SECTION ON CUTANEOUS MEDICINE AND SURGERY, AT THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, AT ATLANTIC CITY, JUNE 7-10, 1904.

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CHICAGO.

The term nevus, originally used by the laity, has been so thoroughly adopted into medical nomenclature to designate congenital blemishes of the skin that any attempt to change or even modify the meaning of the word can only result in confusion, and yet that is the present tendency in dermatology. Unna[1] says that it is questionable if nevus linearis will permanently maintain its place among the nevi because of the rapid development which it frequently exhibits in extrauterine life.

Postnatal development of a lesion of intrauterine origin is a striking clinical fact, but it is hardly of sufficient importance to form the basis of classification. There are few malformations of the skin which may not grow rapidly or even present themselves clinically for the first time in adult life.

French authorities use the expression nevus tardive to designate the late developing nevus. Though well understood in France, I have known this expression to cause misunderstanding in our country.

In England, Crocker[2] says the word nevus is applied only to vascular growths, and he designates neoplasms of intrauterine origin by the term "embryogenic growths."

The *Pratique Dermatologique* adopts Brocq's definition, "a nevus is any circumscribed deformity of the skin." Under this definition adenoma sebaceum is a nevus.

In my opinion the word nevus should be used simply as a term of clinical convenience to designate any mark on the skin present at birth or developing shortly after birth regardless of its histologic structure and without any attempt at scientific accuracy.

This is still the accepted use of the word in other branches of medicine and it should continue to be employed in this sense in dermatology.

Any expansion of the meaning of the word in dermatology will cause as much confusion as does the double meaning of the word tubercle.

As a term to designate deep-seated deposits, the word nodule should be employed, and we should use the expressions nodular syphilide and nodular leprosy rather than call these lesions tubercular syphilide and tubercular leprosy.

1. Unna: Histopathologie, p. 1146.
2. Crocker: Diseases of the Skin, p. 932.

To avoid all confusion of nomenclature and misuse of the word nevus, it would be advantageous to employ the expression developmental defects of the skin, to designate all abnormal conditions of intrauterine origin which are not due to disease of the fetus.

There are two classes of cases, misplacements and anomalies of development. Under the latter class we would recognize anomalies of hair and nails, of keratinization, of pigmentation, of blood vessels, of fibrous tissue and some other forms.

THE CAUSES OF DEVELOPMENTAL DEFECTS OF THE SKIN.

The causes of defective development are probably multiple. At the present state of our knowledge there are two which should be carefully sought for in each and every case that passes our observation: heredity and the toxins of the chronic infectious diseases. "Like begets like." A peculiarity of development existing in one generation of a family is frequently observed in succeeding generations. I have observed three generations of a family in which a tuft of hair like a mane grew over the seventh cervical vertebra with no alteration of the skin developing in each instance at the time of puberty. It was present in the grandfather, in his three sons, and one of the sons having four children, in each of the children.

Peculiarities of development in lower animals may also be observed in succeeding generations. The Holland belted cattle illustrate my meaning. They are a breed of cattle which resemble the Holstein in general build, but differ in the fact that they have a broad black belt extending around the body. This black belt once established, the animals breed true, and it is regularly present in the offspring.

One of the most remarkable examples of the manner in which a developmental defect may become a racial characteristic to be found in the animal kingdom is that observed in Polish chickens, in which a greater part of the brain is an encephalocele contained in a vesicular-like bony protuberance of the skull. Aldroini[3] mentioned these fowl in 1600, at which time the deformity does not appear to have developed into a breed characteristic.

THE TOXINS OF THE CHRONIC INFECTIOUS DISEASES.

Charrin and Gley,[4] wishing to study the effect which the toxins of chronic infectious diseases would have on the offspring when administered to the parent animal, subjected rabbits, both male and female, to the influence of such toxins, and after a variable length of time bred the animals, sometimes mating a healthy buck with a doe which had been subjected to toxins, sometimes reversing the mating and again breeding animals both of which had passed under the influence of toxins.

The results were most striking and excited great interest in France, especially among dermatologists.

Barthelmy[5] has tried to show that the toxins of syphilis cause various stigmata such as nevi and all kinds of imperfect development in the third generation.

Since my attention has been directed to this subject I have observed a number of cases in which this theory could be invoked, and I have seen some in which no such explanation could be offered; the subject is worthy of consideration.

3. Aldroini: Eulenburg's Real-encyclopädie der Gesammten Heilkunde, vol. xv, p. 451.
4. Charrin and Gley: Cliniques de l'Hôtel Dieu, 1897.
5. Barthelmy: Annales de Dermatologie et Syphiligraphie, 1897, p. 885.

THE DISPLACEMENTS.

Tho developmental defects of the skin which are of greatest importance at the present time are those which are formed by the glandular elements of the skin and the pigmentary mole. These conditions have been more discussed by dermatologists during the past few years than almost any subject of cutaneous medicine.

According to Unna pigmentary moles are cell inclusions. Crocker describes adenoma sebaceum as a congenital overgrowth of an adenomatous character, developing from embryonic remnants in the skin. He has seen them develop in adult life and he finds them not uncommonly in the inmates of idiot asylums.

Hydradenome eruptive is described as a nevus in the *Pratique Dermatologique* and most authors describe benign cystic epithelioma as belonging to this disease. Toerock[6] says that he formerly shared this opinion, but since studying sections obtained from Brooks' case he has concluded that benign cystic epithelioma should be held separate and apart from hydradenoma.

From a study of slides from Fordyce's case I agree with Toerock. I see no reason to believe that the growth is derived from the sweat glands. The opinion originally expressed by Fordyce that the cells are derived from the rete I believe to be correct. That there should be any controversy on this subject is due to the fact that hydradenoma may clinically resemble benign cystic epithelioma very closely and that those who have studied hydradenoma microscopically have not had slides from benign cystic epithelioma for comparison.

In my opinion these conditions are one and all of them displaced cells, the displacement occurring in embryonic life, carrying with it different parts of the skin in different cases. In one case the displaced cells are chiefly derived from sebaceous glands and develop into adenoma sebaceum in postnatal life. In another case the displaced cells are mostly sweat gland epithelium which will form hydradenoma eruptive. Benign cystic epithelioma results from the displacement of cells of the rete.

The pigmentary mole, which is the most common of all displacements, contains cells which are of an embryonic type. These conditions are in every way the equivalent of dermoid cyst of the ovary, provided we agree with Marchand that dermoid cyst of the ovary is a displacement. It develops in adult life; it may contain teeth, hair or cholesterin and its walls may be lined with a membrane containing dilated sebaceous glands; one or the other accessory organs of the skin preponderating.

THE PIGMENTARY MOLE.

Clinically this malformation of the skin varies within wide limits, from the simple stain remaining unchanged throughout life, to the mammillated plaque of the covered regions of the body or the hemispherical pedunculated pea-sized tumor of the face often having a growth of a few hairs. As a rule it exhibits a gradual increase in size and frequently a decrease in pigmentation as the years go by.

Histologically they are all of the same structure, containing displaced connective tissue, displaced epithelioid cells, and displaced hairs with more or less abnormal pigmentation. The variation in the clinical symptoms is due to the amount of tissue displaced and to the preponderance of one element of displacement over another. A simple stain of the skin contains only a small cluster of epithelioid cells, while a mammillated plaque contains large perpendicular strands of epithelioid cells alternating with strands of coarse connective tissue.

6. Toerock: Mraeck's Handbuch der Hautkrankheiten. p. 482.

The pigmentation differs widely in different cases; it is like that of the negro, present in the form of fine grains in the deep layers of the rete, but it has an uneven distribution.

THE EPITHELIOID CELLS OF THE PIGMENTARY MOLE.

After ten years of discussion regarding the nature of these cells we may state, that the older opinions that they are the cells of lymphatic channels, endothelial cells, etc., have now few supporters and that it is the opinion of most investigators that they are either embryonic connective tissue cells, as Riehl and Rieche believe, or else they are epithelium cells, as Unna and his followers, who are in the majority, believe.

According to Unna's theory the rete pegs grow downward into the corium about as they do in a wart, and clusters of cells become detached from their ends and undergo a metaplasia by which they lose their prickers and revert to the embryonic type, and furthermore, this cleavage of cells in clusters and metaplasia occurs not only *in embryo*, but may even be seen occurring in infancy. Just as drops of water drip from the point of an icicle so do these clusters of cells become more slowly detached from the ends of the rete pegs.

That clusters of cells actually become detached from the rete pegs he determined by serial sections, and his findings have been substantiated by Gilchrist, Schueber, Abesser and others, while on the other hand Ribbert and Rieche[7] find that no separation occurs and they believe that the peculiar figures of the rete pegs which at first view appear to be clusters of cells detached, undetached and in process of being detached from the rete pegs, are produced by oblique sectioning and by outward pressure. Rieche finds that the rete figures occur in nevi of adult life even in the sixtieth year, and he finds no separation in serial sections.

Abesser,[8] who accepts Unna's theory, also finds them in adult life. I have found them as late as in the fortieth year of life, and I agree with Rieche that no detachment of cells occurs.

Unna has observed these same figures in certain cases of fibroma molluscum and he argues that their presence shows that such cases are really cases of nevus. Whitfield[9] finds them in nevocarcinoma even more frequently than in the nevus.

A microscopic finding is one thing, an interpretation of the finding is another thing, and these two things are to be considered separate. Before any attempt is made to elucidate a microscopic observation, every possibility of diagnosis should be considered and that has not been done in the study of this condition.

Unna's theory depends entirely on the interpretation of the figures of the rete pegs, and as I am convinced that no separation occurs, I maintain that his theory should be discarded.

There is no doubt in my mind that the displacement occurred and was completed in early embryonic life. In other words, the pigmentary mole is to be explained by the Cohnheim theory and not by the Unna theory.

Whether the displaced cells are epithelium or connective tissue can not be determined at the present state of our knowledge. Unna gives the reasons for believing that they are epithelium and Rieche the reasons for believing that they are connective tissue.

If Kromayer's[10] theory of desmiophasia is accepted as

7. Rieche: Archiv für Dermatologie und Syphilis, vol. lxv, p. 63.
8. Abesser: Virchow's Archiv, 1901, vol clxvi, p. 68.
9. Whitfield: British Journal of Dermatology, 1900, p. 267.
10. Kromayer: Archiv für Dermatologie und Syphilis, vol. lxii, p. 209.

correct, the question is of little importance, inasmuch as a connective tissue cell may be transformed into an epithelium cell.

THE MALIGNANT GROWTHS WHICH DEVELOP IN DISPLACEMENTS.

Hallopeau and Derier[11] have reported a case of hydradenoma complicated with epithelioma, and Audry has reported a second similar case.

An epithelioma developed in Dyer's case of benign cystic epithelioma and also in White's case. Epithelioma may appear in moles and occasionally a spindle-cell sarcoma, but the tumor of greatest interest which develops in moles is the melanotic small round-cell growth which is now called nevocarcinoma.

The melanotic pigmentation which is present in

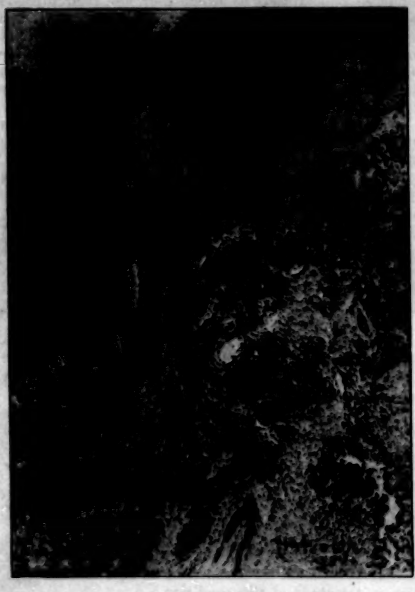

Fig. 1.—(Low power.) Simplest form of nevomelanoma. Epithelioma of the epidermis and nevomelanoma with its accompanying pigment in the derma.

greater or less amount in these growths is one of their most characteristic features. Clinically melanosis may involve extensive areas of cutaneous surface and be present for a considerable length of time before the tumor develops sufficiently to be recognized. It may spread into healthy tissue surrounding the tumor; it may affect the skin in large plaques at a distance from the tumor, as in Bamberger's case, or involving the lymphatic vessels, it may produce a true lymphangitis extending from the neoplasm to adjacent lymphatic glands.

Eve[12] has recently reported an important series of cases which show that melanosis may occur in the skin or visceral organs, or metastatic tumors may develop and on examination lymphatic glands will be found in some part of the body as the first sign of disease and in close proximity to a mole which shows no change.

It is not uncommon for the disease to start from a mole which shows no symptoms of the disease. The case reported by Hanocque[13] in 1868 as a case of primary melanosarcoma of the axillary glands was possibly of this category. Melanosis is not always a sign of malignancy; it exists normally in the iris and some other parts of the body.

Ullman[14] presented a case of cavernous angiomata of the face before the Vienna Dermatological Society which exhibited black pigmentation. In discussion Kaposi stated that he could not conceive of such tumors being present in the absence of sarcoma, and he would advise that a very thorough search be made for the presence of sarcoma cells. His suggestion was followed with negative result; the patient died of septic pneumonia after being under observation for six years, and a careful postmortem failed to reveal the presence of sarcoma in any part of the body.

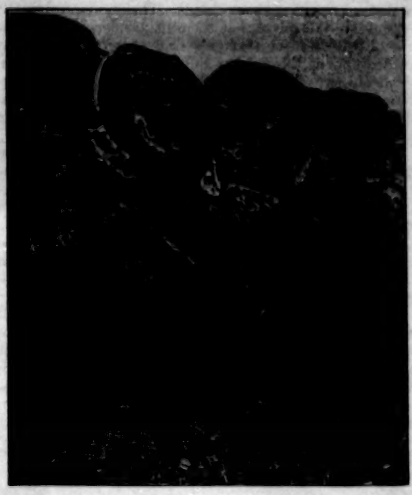

Fig. 2.—(Low power.) Honey-comb-formed nevomelanoma. The nevomelanoma has invaded the epithelioma, producing the honey-combed appearance. The epithelioma represents the comb, and the nevomelanoma and its accompanying pigmentation represents the honey.

Nervous exhaustion or shock may produce melanotic pigmentation. Bark[15] has reported the case of a woman, 53 years old, who, receiving a severe mental shock caused by the suicide of her daughter, developed generalized melanoderma which lasted two years.

I find this difference between the pigmentation of the nevus and that of the nevocarcinoma; the pigmentation of the nevus is associated with the epithelium of the rete, the hair root or the glandular epithelium, while that of the tumor is associated with the epithelioid cells.

11. Hallopeau-Derier: Pratiques Dermatologique, vol. I, p. 202.
12. Eve: Practitioner, 1902, p. 165.
13. Hanocque: Bull. de la Société Anat., 1868, p. 223.
14. Ullman: Archiv für Dermatologie und Syphilis, vol. XXXV, p. 197.
15. Bark: Archiv für Dermatologie und Syphilis, vol. XIV, p. 283.

NEVOMELANOMA.

Schalek[16] bases his opinion that the malignant growths which develop in nevi are carcinomatous mostly on a study of the chromatophores which have now lost their importance in determining the character of these growths. They are probably leucocytes transporting the superabundance of pigment which the tissues produce to the lymphatics and blood vessels, thereby causing melanemia and melanuria, which are essential features of the disease.

Ravogli[17] especially emphasises the alveolar arrangement and the relation between the epithelium cells and the pigment.

Green[18] says that the sarcomatous nature of angiosarcoma which has an alveolar arrangement can not be questioned and that the distribution of the pigment in these tumors is not of such a kind as to indicate that the epithelioid cells were derived from the rete. I agree with Bland Sutton[19] that the alveolar arrangement is simply an exaggeration of the normal arrangement of the nevus.

Waldeyer, whose opinion carries greater weight with it than that of anyone else who has accepted Unna's theory, bases his acceptation on an inspection of Unna's slides without showing that he has studied the effect of outward pressure, and the same criticism may be offered of most of the others who follow Unna.

For the material which enabled me to study these tumors I am indebted to Professor Herzog of the Chicago Policlinic, and to Professors Hektoen and Le Count for placing at my disposition the splendid material contained in the laboratory of Rush Medical College.

The *Pratique Dermatologique* says "that the characteristic which distinguishes this tumor from all other cancers is that in the structure of its elements and in the texture of its tissue, it is intermediary between a carcinoma and a sarcoma."

That the tumor is derived from the epithelioid cell of the nevus there can be no doubt. Wherever we find one of these tumors forming in the epithelioid cells of the corium we know that an epithelioma like down growth of the rete may be seen in the immediate vicinity (Fig. 1).

This was the finding in Gilchrist's,[20] Waelsch's and Minne's cases and in all the cases examined by me. The microscopic picture which the growth presents depends on the manner in which these two tumors, developing in close proximity, combine.

Wælsch[21] published his cases to demonstrate the fact that the tumor does invade the epidermis. He is quite correct, but he overlooked the important fact that when it does it pushes the epithelium cells aside. The cells of the tumor never mingle with the cells of the epidermis; one can always distinguish the tumor cells with the accompanying pigmentation from the epithelium cells. In some cases, through the development of the tumor cells in the epidermis, a honeycomb-formed tumor is produced.

As is shown in Fig. 2 the epidermis cells form the comb and the tumor cells with the pigmentation represent the honey. In cases where the epithelium cells are rapidly proliferated and imperfectly formed the growth is like a venereal wart, consisting almost entirely of scrolls of epithelium cells with small interspaces between the scrolls which contain the tumor cells and their pigment (Fig. 3). In this class of cases what is tumor cell and what is epithelium cell can always be determined.

This fact that we can distinguish the tumor cell from the epithelium cell, and the fact that the tumor cell always pushes the epithelium cell aside, are, in my opinion, important in determining the classification of this tumor.

Where a metastasis occurs to a neighboring lymphatic gland or develops in a visceral organ, it is the tumor cell and its pigmentation and not the epithelioma, which is transported.

Green says that the tumor of the choroid which has always been looked on as sarcoma and the formation of which has always been considered to be connective tissue, corresponds fully in architectural structure with the nevomelanoma.

Fig. 3.—(Low power.) Venereal wart-like form of nevomelanoma. The nevomelanoma, with its accompanying pigmentation has invaded the interspaces of the epithelioma-epithelial pearl.

Le Count (personal communication) states that given a metastatic growth of the skin, one can not determine whether the primary tumor was located in the skin or in the choroid, inasmuch as the same form, size and character of cell, the same pigmentation, and the same alveolar structure is present. The primary tumor showing the same characteristics could be distinguished by anatomic landmarks such as an attached piece of normal skin. Anyone with the necessary material at his disposal may convince himself that this statement is correct.

Gensberg and almost all other oculists believe that the choroid tumor is a sarcoma.

There is no tumor classified to-day as carcinoma which differs from all other forms as much as does this form,

16. Schalek: Journal of Cutaneous Diseases, 1900, p. 117.
17. Ravogli: Journal of Cutaneous Diseases, 1901, p. 270.
18. Green: Virchow's Archiv, 1893, p. 251.
19. Bland-Sutton: Tumors, Innocent and Malignant, p. 110.
20. Gilchrist: Journal of Cutaneous Diseases, 1899, p. 362.
21. Waelsch: Archiv für Dermatologie und Syphilis, vol. xlix. p. 349.

The rodent ulcer is a distinct variety of epithelioma until it reaches the terminal stage, when it assumes the general characteristics of all other malignant epithelium neoplasms; not so with nevocarcinoma; it presents special clinical and histologic characteristics from beginning to end.

Birch-Hirschfeld[22] says: "In regard to the clinical features of these tumors we will state that the melanosarcoma, as is well known, shows a high degree of malignancy, which is not due to a tendency to local destruction of the growth, as in carcinoma, neither is it due to toxemia, but rather to the multiple development of metastatic tumors which appear in the terminal stage of the disease. This disposition to the formation of embolic metastasis must be considered the essential basis of the clinical malignancy of the sarcoma."

From what we have said it will be seen that this tumor differs both clinically and in its histopathology from carcinoma. It therefore should not be classified as a carcinoma. It develops in displaced embryonic tissue, which is probably of epithelium origin and it should be classified separate and apart from all other malignant growths and called nevomelanoma.

THE VALUE OF SYMMETRY IN EDUCATION AND CHARACTER.

CHAIRMAN'S ADDRESS BEFORE THE SECTION ON STOMATOLOGY AT THE FIFTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, AT ATLANTIC CITY, JUNE 7-10, 1904.

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In the contemplation of any subject, be it animate or inanimate, the pleasure and satisfaction derived therefrom is dependent in a great degree on its symmetrical proportions; indeed, asymmetry, as seen in many objects, and especially in the human form, is a positive disfigurement, and is often repulsive.

But symmetry as I wish to discuss it will be considered in connection with the mind and soul. It will be noted at once that lack of symmetry in the mind is not so readily observed as a similar condition of the body, although they are vastly more common, and the deviations from what might be considered typical in the former would be altogether hideous if the same disproportion were exhibited in the physical system. Imagine a nose, which by a slight aberration of development has continued to grow until it is twelve inches long; or one eye eight inches in diameter and the other a mere pinhole! Such an extreme in physical deformity has probably never been known, yet similar disproportions, or greater, may easily be conceived to exist in the different powers of the mind. In the dental profession we should not expect to find excessive abnormalities or great deficiencies in intellect, but there are many indications that the majority of practitioners might develop their mechanical and intellectual powers in certain directions with great benefit to themselves and patients, and everlasting good to all people over whom they have any influence. This means that there are many defects in symmetry to be observed among dentists, and even among stomatologists.

While some defects may be found in the best of men, those which we have now under consideration are such that they, in many instances, ruin the man as a practitioner, and in nearly all the other cases mar his brilliancy and seriously handicap his professional progress. Take, for example, the life of the late P. D. Armour, the great capitalist of Chicago; his strict devotion to business, at the expense of all social life and entertainment, and his abstemious habits were still kept up even after his financial worth was counted by millions. While his business ability was increasing, other faculties of mind and heart were weakening, and when this hypertrophic condition, in the shape of an enormously enlarged business capacity, became pathologic, and the discrepancy between this and other bodily and mental functions became so great that he began to suffer from the strain, he was urged to rest and go to Europe. He went, but he had lost all capacity for the enjoyment of travel and change of scene, and he died in the harness which he had himself constructed. The following quotation from Charles Robert Darwin shows still further the effect of asymmetrical development:

> I have said that in one respect my mind has changed during the last twenty or thirty years. Up to the age of thirty, or beyond it, poetry of many kinds, such as the work of Milton, Gray, Byron, Wordsworth, Coleridge and Shelly, gave me great pleasure, and even as a schoolboy I took great delight in Shakespeare, especially in the historical plays. I have also said that formerly pictures gave me considerable pleasure, and music very great delight. But now for many years I can not endure to read a line of poetry. I have tried lately to read Shakespeare, and found it so intolerably dull that it nauseated me. I have also almost lost my taste for pictures or music. . . . This curious and lamentable loss of the higher esthetic tastes is all the odder, as books on history, biographies and travels (independently of any scientific facts which they may contain), and essays on all sorts of subjects, interest me as much as ever they did. . . . Why this should have caused the atrophy of that part of the brain alone on which the higher tastes depend I can not conceive. . . . If I had to live my life over again, I would make it a rule to read some poetry and listen to some music at least once every week, for perhaps the parts of my brain now atrophied would have thus been kept active through use. The loss of these tastes is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature.

Prof. Charles Eliot Norton says: "Whatever your occupation may be, and however crowded your hours with affairs, do not fail to secure at least a few minutes every day for refreshment of your inner life with a bit of poetry."

A few weeks ago I met a physician in the suburbs of Boston. He was apparently taking a walk for pleasure, and was observing some birds by the way. My first thought was one of surprise that this physician, in full practice, the author of a large work and in many ways one who must meet numerous demands, could and would find the time for such a purpose, but a moment's reflection convinced me that such use of time was very wise and judicious—that it was necessary, not alone for diversion and recreation, but that it served to cultivate the mind, to broaden the view and to render more sensitive and acute the artistic and moral sense. In many other ways a study of the lower animals increases, by comparison, our knowledge of the higher; and this is, as we well know, of essential value to the physician. It is a grave mistake to neglect the cultivation of the artistic and esthetic sides of our nature, of a love of the beautiful, of sympathetic feelings and of all that is delicate and refined, whether one is fitting to become a physician, a general, or a special surgeon.

Away with the idea that the surgeon needs no feelings of delicacy and sympathy; that, devoid of all sense

22. Birch-Hirschfeld: Real-encyclopædie der Gesammte Heilkunde, vol. xxi, p. 179.

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of feeling, he cuts across nerve and artery, or that he administers an anesthetic which suspends nearly all the functions of life without giving a thought to the real condition in which he places his patient—without feeling the full weight of responsibility in holding a precious life in his hands! It is true that a surgeon should not allow his feelings—his emotions—to be uppermost when he is performing an operation. To all appearance he must be devoid of sensibility, and even sympathy—yet the world knows that the greatest delicacy of perception, the keenest appreciation of possible pain are a part of his equipment, and that it is only the well-being of the patient which demands apparent indifference to suffering. If he can not, for the time at least, lock up his "feelings" so that they will disturb neither his patient nor himself, he loses something of his dexterity and physical poise. But sensitiveness—mental as well as physical—is a very important characteristic of a great physician, and this same sensitiveness is cultivated or lessened, as the case may be, by a man's daily living and his attitude toward life. He may harden and blunt his perceptions as he may, dull his tools if he will, but good work demands the keenest edge of which he is capable.

The practical and important issue before us, in view of the conditions to which reference has just been made, is this: What are the more important defects in our professional life, and what are the remedies? The first consideration in seeking to correct a diseased or any undesirable condition is to discover the cause, and here it is to be sought in the early years of child-life, although, indeed, causes may exist generations before. Manifestly, the suitable preparation of body and mind for the duties of life may be included in the broad term, education. Asymmetry due to lack of development, then, of the body or mind is due to faulty education. Many of our college graduates are like statues, carved to be placed in a frieze. The side toward the public gaze defies criticism, but the rest is of rough, unhewn stone.

It is evident that life is too short to pursue studies in every direction available at the present time, therefore a choice must be made; on this choice may hang future success or failure, and to it we may look for the cause of many deficiencies in development of both body and mind. The writer believes that much is taught in all departments of education which has no vital and practical value in the life work to come. With innumerable subjects for study, with the many subdivisions of these subjects and the almost unlimited extent to which they may be pursued, the great need is shown of weeding out, and also the serious difficulty of doing so. Everything which is taught at the present time has a certain value, and one reluctantly strikes out of the list anything which is worth while, but it is a choice between greater and lesser values. From early childhood it should become a matter for serious consideration, not only as to what shall be taught, but also as to what needs curbing, and what should be strengthened. Mere intellect, as some one has said, is as hard hearted and as heart hardening as mere sense. We need to remember this in our schemes of education. A little child, instead of being confined in a room for hours, where he is taught the alphabet or spelling, would be far better off were he out in the fresh air and sunlight, becoming familiar with the colors and flowers and the facts of nature.

Later in life, in the preparatory schools, no one will question that mathematics is an essential item in the curriculum, yet even here we may make an improvement in the old methods by substituting something more useful and practical for the higher mathematics, leaving these until later, or until the life work is chosen.

The writer has in his school days spent much time over mathematical problems or catch-traps which had no value beyond the discipline and exercise which it gave the mind, and he believes that something else might have been substituted which would have given the necessary discipline and exercise, and at the same time would have educated me in a useful and practical way. On the other hand, overindulgent parents and unthinking teachers may allow a child to follow his bent too closely, and the very danger is precipitated which we wish to avoid. In order to produce a symmetrical figure, the pedestal or foundation must be strong and well rounded, so that however elaborate the decoration of the capital or head of the column may be, there shall be no incongruity between it and its base. A school course which should fitly train mind, heart and body in the right degree would be the ideal one.

It would seem to be a wise procedure if exercises were introduced at an early age with the object of ascertaining the prominent characteristics inherent in each child; for instance, even in kindergarten life, a talent, or the ability to do one thing better than another, is often shown, as are the inventive and constructive powers. Equal attention should, of course, be given to finding out and strengthening weak points. This, if systematically carried out during school life, and a record made and kept for future reference, would be valuable. For example, a young man, with the help of his friends, wishes to determine in what direction his life work shall be. In coming to this decision he not only considers what he thinks he would like to do, what he is most interested in, and how he could obtain the most money, but he should by no means neglect to take into consideration the direction in which his greatest talents lie, the things which he has done with the most marked ability, the work which by nature he is best adapted to do. For this purpose recourse may be had to his school record, which is on file at the schools which he has attended. This record will show, from child life up, the individual's proficiency in drawing and other work which shows artistic ability; also the student's aptness in a mechanical and manipulative way. The inventive powers are often shown even in kindergarten life in the various shapes and ways in which blocks may be arranged, etc.

These and other items of the student's school record should be of great assistance in the choice of a vocation. To take up the life work to which one is best adapted, means the greatest possible usefulness to mankind, the happiest and most harmonious life and the most symmetrical growth. Again, this system of recording should be of great service to those who have charge of the entrance of candidates into colleges of dentistry, law, medicine, and others. This record should stand not only for the applicant's ability as a student, but for his special adaptability to a given profession, and no other entrance examination should be needed. Why should any second examination be made if the first is satisfactory? Is it not a declaration that the first is not to be depended on if the record is made? What a comment on the learning and teaching ability of our esteemed professors in the dental colleges, that their graduates with a diploma bearing their signature and the

seal of the college should fail to satisfy a state board of examiners, or be debarred practice in another state! Surely, there is a great lack of symmetry in the results of our modern college work; if not, then the work of the state board of examiners is unnecessary, for no one should be allowed to practice as a stomatologist without a diploma, and that diploma should stand as the best passport to practice. Regarding the standard of entrance to colleges of stomatology, it should undoubtedly be high, but even this may be overdone and ill-advised. To the writer's knowledge, many who have entered the dental college as graduates of a high school have been among the worst specimens of graduate practitioners, and far below in quality those who had been received without having had such a course. Graduation from a high school as a minimum standard may be used as a basis, but this alone is not sufficient. If symmetry be wanting, the high school graduate is of poor promise and his entrance to the dental college should be postponed or discouraged. If a degree is required for entrance, and it undoubtedly should be, still it is necessary to look for other qualifications, especially if degrees may still be obtained from some sources for money and while it shows nothing of the candidate's manipulative dexterity.

By lack of symmetry in such cases is meant a deficiency in mechanical ability or literary culture, for instance, to such an extent that it would be unwise to receive the candidate. On the other hand, a young student who, for some good reason, has not graduated from the high school, may have such a symmetrical record as far as he has gone, and shows such qualifications of promise, that it would be very unwise to reject him. Of course, desirable candidates do not need an entrance examination; they do not need a four years' course or one of two years; they would reach the high places in the profession in spite of the entrance examination and the college courses, and they are so well endowed, mentally and physically, that they are able to decide as to their own fitness for a certain profession. Their own desire and ambition is for the best things, and they are not limited by years in a college; they would even get on without the college, and no ordinary hindrance could prevent their success. A friend of mine, a physician, now one of my listeners, was with me a few years ago in the Tower of London, and we stood on the spot where Anne Boleyn, Lady Jane Grey and Katherine Howard were beheaded. My friend the doctor remarked: "If they'd let them alone they would have died themselves, long ago." So with the most desirable men of our profession; they are such that if we let them alone they will go on with their professional development without regulations as to entrance standards and length of college courses that we spend so much time in talking about. The problem is to keep out incompetents and the unworthy, even if they may have in a fashion "gone through" some school or college with the required standard. We might have a ten-year course for Jack Blunthead, and he would still be unfit, while Joseph Sharp has passed all the requirements of the ordinary graduate in two years. A matter of years alone, or even the administration of thyroid extract, will not always qualify, and there is nothing that will qualify if there be not inherent in the individual the incentive and the genius to succeed. Quality, not quantity, is the essential requirement, and if this be attained, what can it matter whether the student has achieved it in one year or four, although the preference should be given to the one-year man? Therefore, when it is proposed to extend the dental course to four years, I am opposed to it; but this should not, by any means, convey the impression that anything but the highest standard is advocated.

Time is too precious to compel such men as we have pronounced worthy to enter the dental college, to give four years of their life in it. Three years is enough time to give to that part of the student life which is spent within the college walls. To all right-minded graduates, the end of the college course is but the beginning of studentship in earnest. Out of college the student, now also a practitioner, has entire management of his education and the development of his talents, and his success and future degree of symmetry, the nearness with which he comes to the finished product in man, is limited only by himself.

Among practitioners many defects in symmetry may be observed. There are some practitioners who have developed their mechanical powers to such an extent, and have become so absorbed in some mechanical specialties, so-called, that they are unable when they look at the human mouth to see anything but a possible bridge, crown, or plate; others have a clear vision as to dollars, their other sense perceptions being weakened from disuse. In fact, atrophy is often associated with hypertrophy, and the former may be an indirect result of the latter, both physically and mentally.

Specialties and specialists have done much to advance their particular lines of work, and this is greatly to be commended, but there are disadvantages as well, and these consist in the neglect of general considerations, which, if given some attention, would help much toward a more symmetrical condition.

In the enthusiasm and interest which is taken in certain lines of work in our profession, many of us forget that there are other departments of our work which should also receive attention; that, in many directions, our mental and bodily capacity is weakening through loss of function; that we are better dentists by being better citizens; that we are the best stomatologists when we have cultivated our hearts, minds and bodies in all possible directions around the one central object which draws us all together with a common interest and a common purpose.

31 Beacon Street.

Original Articles.

THE EVOLUTION OF STANDARDS IN DENTAL EDUCATION.*

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In a paper read before this Section one year ago I reviewed the various steps by which dental educational standards had been slowly and laboriously advanced from a mere shadowy pretense of individual schools to the establishment by the National Association of Dental Faculties of a minimum educational requirement for admission to all schools, which was equivalent to two full years of high school, and also the adoption of a full course of instructions for graduation of four years of seven months each.

The four years' course was proposed by resolution in that body in 1899. Action was laid over for one year, and at Milwaukee, in 1900, the faculties' association deliberately and after careful consideration decided on its

*Read at the Fifty-fifth Annual Session of the American Medical Association, in the Section on Stomatology, and approved for publication by the Executive Committee.

adoption, setting forward the time for its inauguration to the autumn of 1903, thus reserving three years more in which it would be possible to change their decision in case it should develop that the time was not ripe for such advance. Thus at the annual meeting of 1903 held at Asheville, N. C., the subject came up for final irretrievable action, which was precipitated by Harvard University Dental Department.

That school informed the association that it would "not at present extend its course to four years," assigning as its reason that it was engaged in contemplating the raising of its educational requirements for entrance at some time in the future.

A special committee had the matter under advisement for three days as to whether the association should "concede that Harvard is entitled to one year less time than other schools having an equal standard of admission, with the exception, it may be, of analytical chemistry and physics." The committee reported recommending that Harvard could not be granted such concession, and after a free discussion the report was unanimously adopted on a roll call of colleges. Harvard then resigned its association membership, and the resignation was promptly accepted. In all this the National Association of Dental Faculties deliberately, unanimously and finally placed itself on record as standing firmly for the four years' course.

Simultaneously at Asheville an attempt was made in the National Association of Dental Examiners to have rescinded the following standing resolution, adopted at Milwaukee in 1900 as a treaty of peace and good faith between the colleges and the examiners, viz.:

Resolved, That no college not an acceptable member of the National Association of Dental Faculties be placed on or continued on the recommended list of this association.

This attempt to rescind failed, and the two associations adjourned in full accord and with the mutual conviction that the four years' course was established for all time, and that the two associations would stand firmly together for its maintenance as a criterion of the reputability of dental colleges.

Thus it transpired that every dental college in the faculties' association, and, in fact, every dental college in the United States save one, opened up the school year of 1903-4 with the four years' course inaugurated and advertised to the world as the established standard deemed necessary by the educators themselves for the proper preparation of the dental student for graduation and practice. It was a brave move—a grand achievement—and the profession at large gave a great sigh of satisfaction that the schools had made this advance step toward removing the stigma which had been cast in foreign countries on the educational methods and standards of the schools of the United States.

It seemed that there remained only the necessity to secure the further requirement of high-school graduation for matriculation (which step had been practically promised by most of our universities and actually inaugurated in some of them) to place this country in the forefront of the nations, with practically no peer. The dream of raising up a generation of educated, scientific professional gentlemen to serve as the standard bearers of dentistry for the near future seemed about to be realized.

The school year for 1903-4 opened with the new order of things, but to the great disappointment of many deans, whose freshman classes were much smaller than the year previous. This condition was largely accounted for by the fact that prospective students had hastened to take advantage of a last chance to graduate in a three years' course and had flocked to the schools the year before in large numbers. This fact also made the first four years' freshman classes seem abnormally small. Of course, the income to the schools was correspondingly small. To the older established and the endowed schools and departments of universities, this did not so much matter, as the check was, of course, only temporary. But the smaller proprietary schools at once took alarm at the decrease in income, and without regard, it would seem, to what effect such a course would have on their standing and reputability in the eyes of the public, began, within a month after the opening of the school year, to devise some plan for inducing the National Association of Dental Faculties to return to the old course of three years for graduation. An effort (which finally proved successful) was made to hold an extra meeting of the association at Buffalo during the Christmas holidays to act on such a proposition. At this meeting it was held and ruled by the president that no action could be taken or business transacted until the next regular annual meeting, but much time was spent in discussing the situation. Sentiment was divided about as follows: One faction, consisting of about one-third of the association membership and representing almost exclusively the proprietary schools struggling for existence, were avowedly for an unequivocal return to the three years' course of seven, or even six, months each. Another smaller faction favored a high-school diploma for matriculation and a three years' course of nine months for graduation. And, lastly, those schools having adequate financial foundation on which to bank in conducting their work on any reasonably advanced standards, those schools representing about one-half the membership in the association, stood and plead for professional honor and professional unity—stood firmly for no retrograde of standards and requirements. When the meeting adjourned it seemed reasonable to believe that no further attempt at lowering standards would be made.

When the national body adjourned at Asheville in 1903 it was with the general understanding that the next annual session would be held at St. Louis at about the same time in August, 1904, as would be held the International Dental Congress—that is, the latter part of that month.

It has been the rule of the schools to issue their annual announcements for the coming school year course some time in June, as the business for the coming year begins immediately after the old term closes. Had the National Association of Dental Faculties held to the plan laid out at Asheville as to the time of the annual meeting, these announcements would all have been issued on the basis of a four years' course before the meeting could occur, and a change in the course would have been practically impossible; but for reasons best known to themselves the majority of members have recently decided to hold the meeting in the City of Washington, June 9. Such a change in program is so unusual that it is but natural to seek a reasonable explanation. At this early date the annual announcements will not have been issued, and it would be entirely reasonable to infer that another attempt may be made to lower standards. Should such an attempt prove successful, there are a great many things likely to happen. It is not conceivable that the endowed and independent schools will tamely submit (even should they be in the minority) to a

retrograde educational movement. They could in no sense afford it, nor would it be in accord with any of their traditions. They have for years submitted to being held back by the inability of the weaker schools to move forward rapidly on account of their financial handicap. It is but reasonable to expect that the faculties' association would either go to pieces or become divided into two separate organizations with separate standards.

The question at once presents: What would be the attitude of the legally-appointed examiners in the states which hold their boards responsible as to the judging of the reputability and standings of the colleges from which their applicants for license have graduated?

What would be the attitude of the profession at large? Will the men who are out in the open, bearing the heat and burden of the day before the public, tamely submit to the open discredit that would be cast on their chosen calling by a national lowering of its educational standards?

It seems impossible that such a calamity as a division of college forces on this question could occur, and still more impossible that a decided retrograde movement can possibly receive the sanction of a majority of the schools. But should this happen, it is safe to predict that the rank and file of dentists will put their stamp of disapproval on such a transaction in no uncertain manner. The prediction is reasonable that schools of the trimming and retrograde type would be allowed to fall back out of sight and be forgotten in the onward march of the development and evolution of dental educational standards.

SOME PHASES OF DENTAL EDUCATION.*

A. E. BALDWIN, M.D., D.D.S., LL.B.
CHICAGO.

In order to realize that we are living at a very rapid rate, we have but to look backward to see the progress that has been made in almost all lines within the memory of even the younger men of the profession. By observation we are shown that the education required to enable one to call oneself an educated artisan, scientist or professional person was very meager as compared with the demands and the requirements of to-day.

The question often arises in my mind whether or not stomatology, as a specialty, has kept pace with the march of progress in other lines, and especially in coincident professional lines. Much has been written, much is being written, and much more is being thought, as to the proper lines of progressional development in education in our specialty. Within the past few years we have seen that the National Association of Dental Faculties has, after long discussions, extended the requirements, preliminary and graduating, until now the time required in our most progressive schools is nothing less than a four years' course, with more strict preliminary requirements. However, by noticing the actions of some of our educators, we fear that there is a movement on foot—especially in the schools which are conducted by private ownership—because of a fear that with these added requirements the collegiate expenses will be increased, with a corresponding decrease in receipts; consequently these schools—which are conducted, if you please, for financial gains incidentally—look on the matter as a strictly mercantile transaction, and I fear that there may be a retrogressive move lessening the preliminary requirements, and also lessening the amount of time necessary to be spent in schools in order to graduate.

It has been my observation for a score of years that there are many people practicing with us who seem to have a fear of acquiring too broad and comprehensive an education; indeed, a short time ago a paper was read before the Odontological Society of Chicago by Dr. H. T. Carlton, San Francisco, in which he advocated a radical advance in not only the preliminary requirements for entering our colleges, but also an emphatic advance in the requirements which must be met before graduation is allowed. This paper was read before the largest assemblage of dentists ever gathered in the world, and, much to my surprise, many men who had been classed with those who were in favor of advanced education showed by their discussion of this paper that apparently they were afraid that the young men entering our field might be too broadly educated and too well grounded in knowledge, not only of the whole human frame, but in all other scientific directions. It was convincing to a reasoning and observing mind that the only hope for rapid and thorough educational progress in our field lies in the schools which are maintained and conducted otherwise than for financial ends. In other words, the hope of dentistry, in its progressive advance, lies more largely than we will admit, first, in the schools which are founded and conducted in connection with our great colleges and universities, and, second, in the gradual elimination of the schools which are conducted by organized capital for the income which it produces, or by the organized professional band who, for notoriety or gain, organize and conduct schools which apparently are more anxious for numbers than for intellectual prominence. This is said with regret and with no intention to belittle or attack any school or college in particular, but with recognition of the fact that if the teachers or the organization have a direct financial interest in the income, gross and net, it must hamper or modify the influence which the school and teachers may exert over the student and the requirements demanded of him.

A great movement in advance can be forced if our national organization of the several state boards unify and exact constantly advancing requirements for entering our chosen field.

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DENTAL EDUCATION.

A RETROSPECTIVE AND PROSPECTIVE VIEW.*

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SAN FRANCISCO.

"We will not anticipate the past, our retrospection will be all of the future."

It is my purpose in this short paper to take a hasty retrospective glance at the history of dental education in the United State, that I may hold before you for a moment a picture of progress that has seldom been equaled in the history of educational advancement, and then to change the view and hold before you another picture, a prospective view, the realization of which will be no more difficult to us and our children than was that of the first picture to our fathers and ourselves.

"Past and to come seems best; things present worse."

Shakespeare never wrote a truer line than this, for,

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if we were satisfied with the present, there would be no progress in the future. Satisfaction with the present brought decay and ruin on the ancient Egyptians and on the Roman Empire.

A RETROSPECTIVE VIEW.

We learn from history that the art and science of surgery is an outgrowth or evolution of the tonsorial art. Two hundred years ago the barber was also the surgeon. His functions were to shave and cut hair; to bleed the prince or the pauper; to bind up wounds and set broken bones. The striped red, white and blue pole which stood before his shop indicated that he was ready on occasion to bleed his patron, bind up his wounds or set his broken bones. The term applied to him was barber-surgeon. His social position was that of a barber, a person to be petted on occasion, or insulted or kicked at the caprice of those of higher social position. To-day his learning and skill have placed him on the highest pinnacle of fame by reason of which kings and emperors have made him their confidant, and freely and without fear have placed their lives in his keeping.

Dental surgery was likewise evolved from the art of the barber, the tinker and the village blacksmith. A little over sixty years ago there was no such institution as a dental college, no such organization as a dental society or even a journal devoted to the interests of dental surgery. At that time the only means of education in dentistry was by the old system of apprenticeship. The dentist in those days had no social or professional standing; he was envied by the barber and looked down on by the doctor of medicine. To-day he is regarded as a member of a noble profession, standing shoulder to shoulder with the physicians and surgeons and dividing with them the honor of adding to the comfort and longevity of the human race by reason of their learning and technical skill.

The evolution of the surgeon, from the barber to the scientist, required several centuries, while the evolution of the dentist from his low degree to his present honorable position has been accomplished in as many decades. This has been wrought partly by the energy and forethought of the pioneers in the profession, but principally by the more favorable environment which surrounded the infant profession.

In these days of the rapid spread of knowledge and learning, the development of the arts and sciences and of the inventive faculties, the ignorance, prejudice and bigotry of the race have been swept away and all men and all movements, either social, political or scientific, are given an opportunity to develop, each standing or falling according to its merit. Surgery in its early struggles had to fight against the ignorance of the people, the prejudice of the scholars and the bigotry of the church, and little progress was made until the beginning of the last century. The discovery of the microscope, of vaccination, anesthesia and antiseptics made it possible for medicine, surgery and dentistry to reach their present high development, a development which is still progressing and must continue to advance in the future.

Dental education may be said to have had its beginning in the organization of the first dental college. This institution, as we all know, was incorporated and established in the city of Baltimore, Maryland, in the year 1840. Its entrance requirements were simply a desire to learn. Its curriculum was anatomy, physiology, chemistry, development of the teeth, principles of operative and mechanical dentistry and laboratory instruction; yet with this meager course of instruction, it developed some of the brightest minds that have been found in the ranks of the profession. Its requirements for graduation were for practitioners of five years' standing, one course of lectures of about four months; for students, two courses.

A reference to the text-books of this period will show how circumscribed and narrow was the field of study, when compared with the text-books of to-day and the requirements for entrance and graduation from our best dental colleges.

With the organization of other dental colleges in various parts of the country, a rivalry sprang up between them, and as the profession advanced in scientific knowledge the curriculum was broadened and the courses extended to five months in each year.

For many years thereafter little or no advancement was made either in the course of instruction or the length of the college year. Hydra-headed commercialism had entered into the schools, taken them by the throat and well-nigh strangled them, for the great aim in most of them had become large classes and a substantial dividend at the end of the year to be divided among the incorporators.

The organization of dental societies, local, state and national, and the establishment of dental journals, which followed very soon after the incorporation of the Baltimore Dental College, and through the succeeding twenty years, were the most potent elements in arousing the colleges from the stagnation into which they had fallen through the commercial spirit. The might and power of these influences are still exerted for the uplifting and stimulating of the best impulses in education, professionalism and ethics. To the dental societies and the dental journals the colleges and the profession at large owe much of their success and scientific advancement.

The regulation of the practice of dentistry by the passage of laws for this purpose, by several of the older states, was an advance step of great moment to the interests of higher dental education. These laws recognized dental surgery as a department of medicine, and for the first time in history it was raised to the dignity of a professional calling. The public had heretofore looked on the dentist as a mechanic, spoke of the trade of dentistry, referred to his office as his shop and his operations as jobs. And, although the dental surgeon was the professor of the honorable degree of D.D.S., conferred *en course*, many persons addressed him by his title in the same spirit that they spoke of the barber as "professor," or the chiropodist as "doctor."

Time, however, changed all this, and the public, by degrees, came to look on dentistry as a professional calling worthy of the best minds and greatest talents. As a result of this change of status in the minds of the public, the dental colleges of this period were overcrowded with students. The demand for more schools seemed imperative, and, as a natural result, many were organized, too many for the best interests of education. Competition of a commercial character, even more strenuous and active than before, took possession of many of the colleges, and some of the weaker schools, feeling that they were being crowded to the wall, opened their doors to any who could pay the fees, promising to graduate them at the end of two courses of lectures. In many instances students were graduated after one course of lectures, and, to our shame be it said, diplomas were issued in some instances to men who had only attended a sufficient number of lectures to identify themselves with the graduating class.

The courses of instruction in the dental colleges of this period were so diverse in subjects and study requirements that students had great difficulty in passing from one college to another, as the faculties of the different colleges often refused to give credit for work done in other institutions. This state of affairs became so unsatisfactory to the colleges and students that several of the leading schools issued a call for a conference of all the dental colleges, for the purposes of harmonizing the courses of study and arranging for comity between the schools and such other matters as should be of mutual benefit to all concerned. This conference resulted in the organization of the National Association of Dental Faculties.

The organization of this association marked a great epoch in the history of dental education, for through its deliberations and established rules, it has exerted a tremendous moral influence over the colleges, both within and without the association. It has kept the colleges within the association up to its prescribed standards for the admission and graduation of students, while those on the outside have been compelled by the state examining boards to seek admission to the association and place themselves in harmony with the requirements of its educational standards. It has brought order out of chaos, in dental teaching; it has harmonized the courses of instruction and has stopped the practice of granting degrees *in absentia*. It has made it possible for students with proper credentials to finish their course of instruction in any college that they may elect. It advanced the requirements for graduation from two to three years. It established an educational entrance requirement and gradually raised this requirement from nothing to a certificate of having passed the examinations of the second year in high school. It has introduced technic teaching in operative and prosthetic dentistry. It has improved and extended the curriculum from time to time by adding such important subjects as physics, embryology, general materia medica and therapeutics, general pathology, bacteriology, comparative dental anatomy, orthodontia, general and oral surgery.

Up to one year ago the minimum preliminary requirements for entrance to our dental colleges was a certificate of having passed the studies of the second year in high school, and for graduation, three full courses of instruction of from seven to nine months in each year.

Until three years ago this was the same standard as that required by the medical colleges. At this time the medical courses were extended to four years and the minimum entrance requirement was advanced to a diploma from a four-year high school. A few of the better class of medical schools now require that the student shall have passed the studies of the sophomore year in liberal arts or natural science, while one insists on the bachelor's degree.

At the present time the minimum preliminary requirements for entrance to the dental colleges, having membership in the National Association of Dental College Faculties, is a certificate admitting the student to the third year of a high school or its equivalent, while that for graduation is four annual courses of instruction of not less than seven months in each year. This, it seems to me, is a record of which the dental profession need not feel ashamed, and yet it should not felicitate itself too much over its progress, for much greater advancement might have been made in educational matters if the colleges could have been united in their work from the beginning.

A PROSPECTIVE VIEW.

The second picture, or the prospective view, must necessarily be one made up largely of personal opinions and impressions, but nevertheless opinions and impressions bred of many years of experience and general observation.

The great need of the profession to-day and for the future is, in my opinion, higher preliminary education and broader and fuller instruction in those fundamental sciences which make up the sum total of a dental education. The profession has done well in the past, but it can not afford to relax its efforts or to take a backward step, now or ever.

For many years the minimum preliminary educational requirements for entrance to the dental colleges were the same as for matriculation in the medical schools, but at the present time they have fallen somewhat behind. This, in my judgment, is a mistake, and it should be rectified at the earliest opportunity.

The requirements for matriculation and graduation in dental surgery should be in no way inferior to the requirements of the medical schools. The courses of instruction in the fundamental sciences should be the same, and during this period the medical and dental students in the great universities should be taught together, and no distinction made between them. By this plan better and more thorough work can be done and at much less expense. This saving of expense would make it possible to employ teachers at an adequate salary who would give their whole time and attention to teaching and original investigation, and as a consequence the teaching would be of a higher grade and the work of the student would be more enthusiastically performed.

What we need to-day and in the future is wide-awake teachers for the fundamental sciences, teachers who are full of their subject and who can impart knowledge in such a fashion that the student can not help being interested in these, to him, otherwise dry subjects. If the teachers of anatomy, physiology, chemistry, etc., are not enthusiastic in their work, the student soon loses interest in them, and turns to the more practical subjects to which he often gives time that could be spent to better advantage on the fundamentals, as he finds, to his chagrin, in after years.

In my work as an examiner for the Dental Corps of the U. S. Army, I have found that the majority of the candidates who have presented themselves for these examinations were deficient in preliminary education and in those subjects usually denominated as the fundamental sciences. In the practical departments they were as a rule quite well prepared. The best marks were usually obtained in operative and prosthetic dentistry, crown and bridge work and orthodontia. In fact, many of them were good jewelers, but lacking in that knowledge which marks the truly professional dentist. This is not the fault of the curriculum, for with the subjects that now comprise the courses of study in our better dental colleges the conscientious, hard working, well prepared student will receive an excellent professional education.

The most serious difficulties which the teachers of the fundamental sciences experience in their work is the lack of time properly to cover the subjects and mental deficiency on the part of a large number of students in every class, whose minds have not been sufficiently trained and disciplined by previous study readily to grasp or comprehend the sciences which they are en-

deavoring to teach. As a consequence, the instructor is obliged to suit his teaching to the comprehension and ability of these students, while those of higher educational acquirements, who could progress much more rapidly had they the opportunity, lose interest in the subject for want of a stimulus to study. This fault can only be corrected by insisting on a higher grade of preliminary educational requirements, and I most sincerely hope that the Faculties Association will not only raise these minimum requirements to graduation from a four years' high school or its equivalent, at its next session, but will recommend the completion of the sophomore year or a full academic training in the liberal arts or natural sciences, as the proper preparation for the study of dental surgery. It is possible at the present time for students of medicine to procure the bachelor's degree in natural science and the degree in medicine by combining the two years' work of the junior college with the four years' work of the medical school. The University of Chicago, the University of Michigan, the University of California and Cornell University now offer such courses, both degrees being conferred on the candidate after the completion of his full medical course.

This is a movement in the right direction and I can see no reason why the universities having dental colleges should not offer the same inducements to their students in dental surgery. With such a class of students the work of the instructor would be a joy, while the profession would gain very greatly by the addition to its ranks of a class of more highly educated practitioners.

A young man who has received a college training has usually been taught the principles of social and political ethics and is therefore better prepared to understand and appreciate professional ethics. Such a young man is generally imbued with higher standards of conduct and of living. He recognises the ethical rights of others and demands that he be accorded the same rights. Such men are seldom guilty of conduct that brings reproach on their profession. They are seldom found in the ranks of the advertising quacks or those who selfishly patent a remedy, an instrument or an improvement in methods, which would be of benefit to suffering humanity, forgetting, or not caring, that nearly every remedy they employ for the cure of disease, every instrument they use, or operation they have been taught to perform, was thought out and perfected by some member of the profession who preceded them, and who freely and unselfishly gave these to their brethren for the benefit of suffering humanity. The profession needs more of this unselfish, better educated, truly professional class of men. It needs to stamp out the commercial idea and install in its place the true professional spirit which places our duty to our patients and the state first, leaving the question of the fee for future consideration.

The lengthening of the college course from three to four years will call out many differences of opinion as to how the extra year shall be employed. Those who teach the practical branches will want to extend instruction in operative and prosthetic technics, while those who teach the fundamental sciences will ask for more time and more thorough courses. The latter, to my mind, is at present the most important side of the question, and it should be given careful and conscientious consideration, for the future of the profession depends on how it is decided.

To obtain the highest degree of instruction the teacher must be a specialist in his department, and with the financial inducements that can be offered by the average dental college such teachers for the fundamental sciences are difficult to obtain.

Specialists in the practical subjects of dental surgery are plentiful and, as a consequence, this part of the training of students leads the theoretical and the scientific.

The student is naturally attracted to those subjects on which he thinks he can see that his future financial success as a practitioner depends. He is, therefore, inclined, through mental shortsightedness and inexperience in the profession, and from his inability to comprehend its responsibilities and his duties to his patients and the state, to neglect those subjects which are of the greatest importance in the development of scientific dentistry, and hence to the welfare of his patients and the best interests of the state. He therefore devotes his energies to those departments which appear to him to promise the largest and most speedy returns in money for the time and study spent on them.

We are a nation of buyers and sellers. Commercialism dominates our people. Trade and trade interests rule the nation. How, then, can we find fault with the student if he partakes of this spirit of commercialism that he can see everywhere around him, that he reads in the newspapers, hears talked on the streets and in the parlor; sees in the bitter competition of some professional men, and can not help but know exists in the management of many institutions of professional learning?

The best interests of higher dental education demands that the management of these schools should be taken out of the hands of the individual or the teaching faculties and placed under the control of the state, or of the trustees of our great universities, for the reason that the majority of the dental schools to-day are still per force commercial institutions, dependent on the fees of students and the profits of the infirmaries to maintain them and pay the teachers and demonstrators. Just as long as commercialism exists in our system of dental education the best results can not be obtained. The interests of the students should be paramount, but this interest is often obscured by holding the dollar too close to the eye. It is marvelous how small an object will obscure our vision if we but hold it close enough.

The first dental college was organized on the commercial basis, and I do not know of a single dental school, even those under state control, that are entirely free from some form of commercialism, for in all of them the fees of the students, or the receipts of the clinics, bear a more or less important relation, either to the salaries of some of the professors or demonstrators, to the buildings they occupy or to the apparatus or furnishings.

In most of the state institutions the appropriations are too small properly to conduct the schools, while in the colleges connected with the large endowed universities no endowments have been made to the dental schools. They are thus left in a measure "to work out their own salvation," in many cases "with fear and trembling," as I know from personal experience.

We could wish that the legislators of the states having professional schools in their universities would appropriate for their support with a more liberal hand; and that good people with fortunes they can not spend and do not know where to bequeath, would endow the dental colleges and place them above the degrading necessity of catering to the commercial spirit, and entering students who have not a proper educational qualification to begin the study of dental surgery, or who are deficient

in that peculiar aptitude for a professional life, through which alone they can hope to develop practitioners who will be an honor to the institutions that are responsible for their education.

I have confidence to believe the day is not far distant when all of the dental schools will either be liberally provided for by the state or abundantly endowed through the munificence of a Rockefeller or a Carnegie. The American people are liberal and just toward all educational efforts, and whenever they are convinced that the best interests of the citizen and the state demand that they render financial assistance to any individual enterprise, it is usually forthcoming.

Another serious drawback in our system of education is the failure to provide advanced standing in the dental course for students who have taken the bachelor's degree in liberal arts and sciences.

These students have had a sufficient amount of didactic teaching and practical laboratory instruction in chemistry, botany, morphology, physiology, zoology and comparative anatomy, etc., to more than equal the work of the freshman class in the dental schools, and under these circumstances their higher preliminary qualifications should be recognized by advancing them to the sophomore class of the dental course. By adopting a policy of this character ambitious students would be encouraged to complete their academic training before entering on the study of dental surgery.

As the matter now stands, the college graduate is placed on the same footing as the student whose qualifications are only those of a second year course of a high school, and the extra six years of study pursued by him in the languages, mathematics, literature, history and the science, count for nothing. This is placing a premium, I was about to say, on ignorance, but I will modify the statement and say, on the minimum requirements for matriculation, and thereby turns away many young men from the doors of the dental schools who would have been an honor to the profession.

I am constrained, also, from my sense of justice, to make another suggestion, namely, on the matter of advanced standing for medical graduates. Since the adoption of the four-year course for medical and dental colleges there would seem to be no good reason why medical graduates who have taken a full four years' course should not be advanced to the junior grade of the dental colleges.

The four years of training of the medical graduate, preceded by a full four years' high school course as a minimum matriculation requirement, is certainly equal to the freshman and sophomore courses of study in the fundamental sciences as taught in the dental schools, preceded by only two years of the high school course as a minimum entrance qualification. It would therefore seem no more than a just recognition of the scientific work performed that he should receive such advanced standing in a dental course. If such students, devoting their full time and energy to the study of the purely dental subjects for two years can not make as good operators as their fellows who entered with the minimum qualifications and have spent four years upon the dental course, then the value of higher education as a prerequisite for professional study is a myth and a snare.

Let us look at this matter in a reasonable light and place ourselves on record as favoring the proposition of giving due credit for scientific work performed by candidates for matriculation who hold the B.A., B.S. or M.D. degree from colleges and universities of recognized repute. Scientific knowledge is of as much value to the dental surgeon as it is to the physician and the surgeon, for without the employment of this knowledge in his profession, the dentist is nothing more than a handcraftsman.

DISCUSSION

ON PAPERS IN SYMPOSIUM ON DENTAL EDUCATION BY DRS. EAMES, CHITTENDEN, BALDWIN AND MARSHALL.

DR. EUGENE S. TALBOT, Chicago—Anticipating that something might be said in the chairman's address in regard to the length of term in the dental colleges, and the position that would be taken at the meeting in Washington, I wrote letters to Professor Eliot of Harvard and to President Harper of the University of Chicago, asking them to prepare papers for this section. President Harper was unable to comply with my request, but I have a letter from Professor Eliot, which I will read at this time.

Dear Sir: I shall not be able to attend the meeting of the Section on Stomatology of the American Medical Association at Atlantic City, June 7-10, 1904. The proper person to state the position of Harvard in regard to the future policy of its Dental School is the dean of that school, Dr. Eugene H. Smith, 283 Dartmouth Street, Boston.

The policy of the Harvard School is not commercial in the least. It is steadily endeavoring to raise the standard of dental education, and has in a good degree succeeded. Just now it is trying to raise the standard of the admission examinations to the school, and is finding that a difficult task. It can not add, at the same time, to the length of its own course. Moreover, the school has been struggling for several years to maintain a close connection with the Harvard Medical School. The task has proved difficult because of the rapid improvement of the Medical School consequent on its admitting none but the persons who already hold a degree in Arts or Science. The Dental School must accomplish both the tasks to which it has set itself before it can lengthen its course to four years. The Section on Stomatology may rest assured that the Harvard Dental School will continue to do what it always has been doing—namely, contribute to the improvement of the preparatory course for the dental profession.

Very truly yours, CHARLES W. ELIOT.

I am sorry to say that Dr. Smith can not be present, but Dr. Briggs will give us some idea of what the school will do.

DR. E. C. BRIGGS, Harvard Medical School—I am sorry that Dr. Smith can not be here to give you the best idea, and as it was only a few days ago that he told me he could not be present, I have not been able to make any real preparation or collect any special data. I can, however, point out one or two things and state a few facts which I hope will impress on your minds the idea that Harvard is not blocking in any way dental education. In fact, it seems ludicrous that others should have placed her in such a position, when she has always been struggling quite the other way, and, I may say, struggling against her own commercial interests. We have decimated our classes time and again by the advances we have made over other schools.

The question is, What elevates the profession? We speak about the progress we have made, but we lose sight of what really elevates the profession as a whole. There are plenty of men in the profession to-day who have elevated themselves as high as any one could wish, who have not had any particular preliminary training. They have had the genius and have made the geniuses, but that does not raise the profession as a whole. That is the feeling that we have at Harvard. To set the profession right before the world, attention must be given to the character of the men and their scholarly attainments, and that is the reason we have paid so much more attention to preliminary requirements than we have to the length of the course. The length of the course is a little misleading. It is four years of seven months; Harvard already has three years of nine months. We are only one month short. With that, and with our entrance requirements, we do not feel that we could wipe out our school altogether. We have about cut it in half now, and what better evidence can you have that we are not commercial? If we were commercial we would take in some of the men who come from other colleges who write to know what their position will be on coming into our school. Not one has accepted, because we say, we will give you time allowance, but you must pass every examination before you can graduate. That is not what they want, and they do not come. For the post-graduate our terms would be entirely different. That does away with the suggestion that our line of thought is due to any commercialism. I wish that you would send, as we have

done, for purposes of comparison, to the different colleges, and see what their examination papers are and compare them with ours. Not one man out of ten with a high-school education can come into our school. He must pass the examination with ability to go into college—not twenty-four points, but as many points as he goes. He has got to pass just as good an examination as if to enter Harvard or Yale—I speak of them because they are nearer. So it seems to me that Harvard has been put in an unfortunate light, diametrically opposite to what she really is at heart. The time that a man is in a professional school is of great value to him; we appreciate that as much as anybody else—I do not believe ten years would be too much, if you wish to reach the highest ambition of life. The idea is, that having provided a certain amount of good training, which we think we do in three years, the next best step is to have the man who comes into the school one who is already a scholar and fitted to take up any of the liberal professions. You and I are helped just as much by that uplift. We can not stand back and say we did pretty well and that we only had "reading, writing and arithmetic." If the standard is raised by making it necessary to have something more than that, you will get professional standing. The profession will not make its highest success until the men who come into it are men of education and scholarly attainments.

DR. WILLIAMS, Boston—One of the things which I thought I would object to in teaching in Harvard was that I would have to teach with men who were not prepared to learn. I am glad to know that the standard of the examination has been advanced so that the students are better able to learn. The preliminary preparation is necessary in order to know how to learn to the best advantage.

DR. TRUMAN, Philadelphia—I feel in a somewhat embarrassing position, coming down here as if we were going to attack Harvard. That is not my purpose. So far as I am concerned, I want to advance dental education along the best lines possible. In 1884 we organized the Association of Faculties, and for twenty years we have worked steadily to bring up the standard of education to four years. At Asheville last year, when we supposed we had established that, without any prospect of its being changed, we received a blow from the very highest educational center in this country—Harvard. They requested that they should be given the privilege of three years, because they intended to advance the preliminary standard to the A.B. degree eventually, and for that reason and for the higher standard which they claim at present, they believe that they had a right to a three years' course. I was chairman of the committee which took that matter in charge, and we could not, under the circumstances, agree to the proposition, because other universities in this country had practically the same standard and the same length of time. Now the action of Harvard on that occasion was an encouragement to the commercial schools. I know very well that Harvard has never been a commercial school. No one can charge Harvard with that. It has always been exactly the contrary, and that is why I was astounded at that time at the action of Harvard. After they left the Association of Faculties we heard that we were to be met, first at Buffalo and in a day or two at Washington, with the commercial idea of going back to three years because the schools can not maintain themselves. Now, Harvard may not have meant this. Harvard did not mean it, but at the same time that influence has been an injury to general dental education in this country, and I don't see how Harvard can explain it.

We have had this afternoon a good deal that is of value in these papers, and as a rule I am in unity with them, especially with the paper of our chairman. I agree with the proposition that the higher in a general way you can educate a man the better, but you must have that education properly arranged in order to be of value. The idea to me is pre-eminently absurd to suppose that because a man has an A.B. degree that he is qualified thereby to become a dentist. It is a fallacy. The high-school degree is equally fallacious. What we need in dentistry is an education that will fit a man to become a dentist. If he is to be a dentist he should come up from the mechanical school, through the higher schools, and then reach a point where he can be of value to himself and the community at large. There is probably not a man here in this room who ever had more than two years of four or five months' study in the professional schools. I do not believe that we can make dentists out of all men, whether they have the A.B. degree (and we have a number of them) or whether they have the high-school degree; that is not the point. We must go deeper if we are going to have symmetry in our educational effort. My own idea has been that the poor dentists we have turned out have, as a rule, been men of higher education—not the fault of the higher education, but the fault of a lack of proper symmetry in that education. Let me illustrate: I had two boys to educate. One was my own son, the other a nephew. My own son I insisted should take a six years' course to acquire a proper classical education. He graduated with the highest honors of the university and with nothing in anything else. The other boy was mechanical. I insisted on his going through the manual training and from the manual training school to the university, and from the university to a post-graduate department in one of our large manufacturing establishments, making nearly eight years in his particular direction, and at the present time, at thirty years of age, he is superintendent of motive power in one of our largest establishments in Philadelphia. My own son became a teacher. That is what I mean by symmetry in education; training the men from the very beginning so that they can practice whatever they expect to be their calling, and not supposing that because a man has an A.B. degree or any other degree of that character, that he can go into a dental school and become a dentist. The thing is an impossibility and a fallacy. This very day I have before me large numbers in our own university who are utterly unfit to practice dentistry, and it is a source of tribulation to me that I have to meet that sort of thing. They have not been properly trained from the beginning. They have not the manipulative ability that ought to come with good practice, and they will never get it, because they have reached an age when it is impossible that that shall be perfected in the individual. If we are going to advance education we must look at it intelligently. Let us come down to practical matters. Let us take our own experience, the experience with me that covers nearly half a century, and we know it can not be done in this way. Harvard will not do it, because in the first year Harvard ignores almost entirely the technic of dental education. In the old laws regulating mechanical work in my own state, young men had to go into apprenticeship, working for four or five years until they reached their majority at 21, before they could practice any of the mechanical trades. Then they were skilled in their work. Here we are trying to turn out men in three years in one of the most complex mechanical professions that I know anything about in this world, that of dentistry. We would turn them out with a fundamental knowledge of anatomy, bacteriology, histology, etc., and the mechanical training almost entirely ignored. Is that what we are here for? Are we here for that purpose alone? If we are, then I am not a dentist.

DR. WILLIAMS, Boston—Dr. Truman is right in his views regarding the manipulative qualifications of a dentist. It is necessary that they should be trained properly and early. I have known some of the best manipulators to be the greatest failures in their operations from not knowing when and how to exercise their manipulative skill. I have known of one or two instances of fatal result, from very high skill misplaced.

(This discussion is to be continued. As the issue of June 25 is the Index number, it will be continued in the issue of July 2.)

Medical Study Trip to the German Spas.—The fourth German study trip for physicians will include this year the watering places of Johannisbad, Salzbrünn and six other resorts. The party will assemble at Görlitz September 7 and disband at Breslau eleven days later. The total expense for the trip will be about $34. The sanatoria and convalescent homes at Görbersdorf and other points on the route will be visited and also the model miners' quarters at Waldenburg. Further particulars may be learned on application to Dr. W. H. Gilbert, Baden Baden.

NOTES ON CURETTAGE.

WITH REPORT OF A CASE OF ACCIDENTAL PERFORATION OF THE UTERUS.*

A. P. STONER, M.D.
DES MOINES, IOWA.

At one time the curette was offered as a panacea for nearly every uterine disorder. Indeed, it was often ruthlessly used on the most insignificant provocation, where Nature, with the assistance of a little general treatment, would have sufficed to cure. Retained secundines following abortion and miscarriage may usually be readily removed with the finger. It is not advisable, however, to immediately dilate the uterus in order that the finger may be employed, for in cases in which the organ has become contracted to such an extent that instrumental dilatation becomes necessary, the amount of débris is found to be small, and may readily be removed with the curette. On the other hand, when there is an abundance of foreign tissue in the uterus, its removal with the curette is attended with much difficulty, and one is never sure when the cavity has been emptied.

I recall one instance of an incomplete abortion in which, after having apparently emptied the uterus with the curette, I was about to insert the packing (which was then the practice), when I found that my finger could be readily introduced, and was much chagrined to find that the organ still contained a considerable amount of detritus.

I have long since ceased the practice of packing the uterus after this operation. Except when necessary to control hemorrhage, I see no reason for such procedure. Gauze acts as a dam instead of a drain, and by obstructing the free outflow of disorganized tissue and toxins, serious results have followed its use. Gonorrheal endometritis should never be treated with the curette. The most painstaking operator is seldom, if ever, able to remove all the infected endometrium with the curette. I had occasion once to remove the organ immediately after having thoroughly curetted it, and was surprised to find many islands of tissue which had entirely escaped the curette. Even if it were possible to remove all the infected endometrium and thereby destroy the main army of the invaders, a large reserve force may still remain within the fallopian tubes and later attack with renewed energy the new-formed cells of the uterine cavity. Once the fundic cavity becomes infected with the gonococcus, the tubes rarely, if ever, escape its ravages. If, therefore, the tubes are already infected, the use of the curette will only create greater perturbation in the infected area, and, indeed, may be the means of spreading the infection.

Curettage has become such a common practice that there are few practitioners who will not attempt the operation. My observation leads me to believe, however, that comparatively few surgeons become skilled in the use of the curette. Faulty technic is often manifested in operations on cases of simple endometritis. Then, again, cases for curettage are not always properly selected, in either of which case the patient receives little or no benefit; indeed, may become much worse. The uterus should be first outlined bimanually, and before the curetting is begun, the uterine cavity should be carefully explored with a dull wire curette. Then with the image of the uterus, and especially its cavity in mind, every part of its surface is systematically scraped with a thin sharp curette, the cornua being separately treated with the smallest sized instrument. The cavity is then washed with sterile water, and no packing used except in septic cases; a little loose iodoform gauze may be left in the vagina, which should be changed twice daily.

Practically the only danger arising from the operation is that of infection. This can usually be avoided by the practice of scrupulous cleanliness. Indeed, the preparations for curettage should equal those for vaginal section. Infection following perforation of the uterus by the curette appears to be a rare occurrence. The peritoneum is able to take care of a great deal of toxic material, so long as it remains unimpaired, such as may be produced by handling or prolonged contact with the atmosphere.

An accident occurred in my practice recently, it being the first one of the kind in an experience of more than fourteen years, during which time a fairly large number of such operations have been done. The case is briefly as follows:

Mrs. V., aged 37, very corpulent, 5 children, no miscarriages. Six weeks previous to operation she was confined at full term. The child had been born some 20 minutes when I arrived, and the placenta was still *in situ*, and an alarming hemorrhage was going on. I quickly applied the usual methods for delivery of the afterbirth and on failing, introduced my hand into the uterus and found a portion of the placenta, covering a surface half the area of my palm, still adherent to the uterine wall. Its detachment was very painful to the patient, and in spite of my somewhat prolonged effort to remove it, some placental tissue was left attached to the surface of the uterus, it being completely adherent. Although my hand had been hurriedly sterilized, I was somewhat surprised that no immediate infection ensued.

The patient was up at the end of 10 days and began to look after her household affairs. The lochia continued for 3 or 4 weeks, and was succeeded by a sanious fetid discharge. Pelvic pains soon appeared and were followed by considerable general disturbances, such as headache, malaise, accelerated pulse, etc., and I decided to curette.

The operation was done under chloroform at the patient's home. Owing to the thickness of the abdominal walls the uterus could not be outlined. No dilatation was necessary. A medium-sized dull curette was introduced in order to outline the uterine cavity and ascertain if any loose débris was present. Scarcely had the manœuvering begun, when the instrument suddenly glided into the abdominal cavity. In order to satisfy myself that it had passed beyond the uterine cavity, I permitted it to pass in its full length, which by actual measurement proved to be 8.5 inches. The cavity of the uterus was found to be about 3.5 inches deep and contained but little débris. The endometrium, however, was thoroughly gone over with a large sharp curette and the operation completed without uterine irrigation or packing. Carbolized vaginal douches were given daily and the recovery was uneventful.

The patient is now, three weeks after the operation, fully convalescent and feels well.

Had the uterine infection been of a virulent type, this report, had one been made, would doubtless have shown a different result. The walls of the uterus at the site of the perforation must have been extremely thin and much softened, for no apparent resistance to the curette was offered, and I believe the accident might have occurred to one more skilled in the operation. The same accident once happened to Pozzi.[1] In his case bilious vomiting occurred on the day following the operation. The accident is a horrible possibility in any case, but only a bungler would meet with it except when the uterine walls were softened, as has frequently been found in cases of infection following labor and miscarriage.

* Read before the Polk County Medical Society, March 1, 1904.

1. Treatise on Gynecology, pp. 175-6.

Special Article.

THE PROPHYLAXIS AND TREATMENT OF FOURTH OF JULY TETANUS.

The annual epidemics of Fourth of July tetanus have shown only too plainly how ineffective are our best and most hopeful methods of treating lockjaw. While the figures for the fatality of traumatic tetanus generally quoted in text-books give 70 to 80 per cent. of deaths, yet we have every reason to believe that in the tetanus following blank cartridge wounds there are much fewer who recover. In investigating the cases of last year it seemed that not much, if any, more than 5 per cent. recovered, and this in spite of the use in many cases of antitoxin, as well as other recognised methods of treatment. This is probably in part due to the age of most of the victims, for the prognosis is much worse in children than in adults. It will be remembered by many of our readers that last year THE JOURNAL[1] investigated the results of the accidents of the celebration of the Fourth. The following is an extract from the tabulated statement there given:

Deaths from tetanus	406	
Deaths from other causes	60	
Total deaths		466
Non-fatal injuries	3,983	
Total persons dead or injured		4,449
Tetanus cases from blank cartridge	363	
Tetanus cases from all other known causes	29	
Other injuries from blank cartridges and firecrackers	2,461	
Other injuries from fireworks, powder, cannon and all other causes	1,364	

From this table it will be seen that the gravest danger of the Fourth is tetanus, which accounted for 406 out of 466 deaths, and that of these cases of tetanus those in which the cause was known showed that the infection occurred in a blank cartridge wound in 363, as against other wounds in 29. We were able to learn positively of but 7 recoveries in addition to the 406 deaths, so that the mortality would seem to be well above 95 per cent. For these reasons it seems advisable to present a thorough consideration of the matter of the prevention and treatment of Fourth of July lockjaw before the next epidemic comes.

THE PATHOLOGY OF TETANUS.

Because there are a number of features in tetanus quite different from those seen in more common diseases, it may be well to first consider the biology of the disease, since the treatment must necessarily be based on the nature of the processes that occur in its origin, evolution, and course. In the first place, the bacillus of tetanus is one of the few anaërobic organisms that are known to be pathogenic to man, and in this respect its range is quite limited. Occasionally the organisms become so modified that they can grow exposed to the air, but this is rare, and is practically not seen in human pathology. The conditions in which tetanus is usually seen depend on the anaërobic nature of the germ, and the famous "rusty nail wound" is dangerous not because of the rust, but because it passes into tissues far removed from air. For the same reasons mixed infections are favorable to the development of tetanus, for the other organisms requiring oxygen for their support use up that which may reach them and so make conditions favorable for the tetanus bacilli. Injections of small quantities of pure tetanus bacilli alone into a guinea-pig may not cause tetanus, when a much smaller quantity associated with the staphylococcus would do so. Furthermore, it has been abundantly shown that the virulence of these bacilli is much greater if they are sown in necrotic tissue or burned areas, which may depend on the fact that such areas are bloodless, and therefore poor in oxygen. These facts alone are sufficient to explain why certain wounds are more favorable than others for the onset of tetanus.

Another important characteristic of the organism is its habitat. In a city the size of Washington there will occur an average of about five cases a year. It is, therefore, evident that the germ can not pass directly from case to case, but must spend the greater part of its career either as a harmless saprophyte or else in some other host, only living on human tissues as a rare incident in its career. As tetanus is not frequent enough in any other animal to explain its continuance of existence as a parasite, we are compelled to fall back to the belief that it lives the greater part of its existence as a saprophyte. The organism can be found anywhere that contamination with ordinary dirt or soil is possible, particularly in substances contaminated with horse manure. From this fact it has been thought by some that it may multiply in the alimentary tract of the horse without causing harm and be spread about in this way. However that is, it is certain that such material is its most usual location, and therefore street dirt is an especially dangerous substance, as well as barnyard and stable soil, or earth fertilised by manure.

The resistance of the organism is another important consideration, for it excels other pathogenic organisms in its ability to withstand harmful agencies; this power is due to the spores it forms. Heating for 80 C. for an hour will not kill these spores, and they survive boiling for some minutes; they are correspondingly resistant to antiseptics. Spores are not destroyed by immersion in 5 per cent. carbolic acid for ten hours. Drying is without effect; splinters of wood covered with tetanus spores after being kept for eleven years have been found still capable of causing tetanus in mice.

From these facts we see that in the case of tetanus we have to do with an organism that is almost universally present, especially in ordinary street dirt, and that possesses great resistance to injurious agencies, and a long life under favorable conditions. These properties would make it a common infecting agent were it not for its strictly anaërobic nature, which limits the favorable opportunities for its growth, these favorable opportunities consisting in the introduction of the bacillus or spore into the depth of a wound so constructed as to shut out the air, and especially favorable if there is much injury to the tissues and a simultaneous infection with other bacteria. It thus becomes evident why there is no class of wounds so frequently followed by tetanus as those produced by blank cartridges. In them we usually find that one or two pasteboard wads have been driven deep into a hand or finger, often carrying with them a disc of the tough palmar skin, and this accident usually occurs in a person whose hands have been most thoroughly covered with street dirt in the process of vigorous celebration. At the same time the explosive force and the heat of the cartridge have led to much destruction of the tissues and hemorrhage, which furnish the remaining *desiderata*. Of course, mixed infection under these circumstances is certain to be added to assure anaërobic conditions. There has been some discussion as to whether tetanus bacilli are present in the blank cartridge wads or not; it really matters little, for without so direct an origin for the bacteria there remains the street dirt, which we know contains them. Wounds made by giant crackers and cannons are also more or less favorable sites for tetanus in-

1. THE JOUR. A. M. A., Aug. 29, 1903.

fection, according as they produce the conditions described above or not. When they cause much laceration and burning of the flesh they are not infrequently followed by lockjaw.

After infection has occurred the career of the organism and its means of causing the disease are quite characteristic and of the utmost importance in considering curative measures. Of the more common infections, diphtheria presents the closest analogy to tetanus, in that in both the bacteria remain quite strictly localized and cause harm by producing soluble poisons that are absorbed into the circulation. It is extremely seldom that the tetanus bacillus enters the blood or reaches remote organs; this has been recorded in the literature but five times, and so it becomes possible to stop the progress of the infection by removing the infected tissue. Furthermore, there are few, if any, fatal infectious diseases in which the number of bacteria is so small, for it is often difficult to demonstrate them with the microscope in the wound secretions or the tissues. Tetanus is, then, of all diseases characterized by a strictly localized infection, and an intoxication with a diffusible poison.

The poison produced by the tetanus bacillus, *tetanotoxin*, is formed in relatively large amounts in cultures, and is thus a favorable material for study; on this account it is the best known of the bacterial poisons and has been obtained more nearly pure than any other toxin. It has been estimated by Brieger that about one-three hundredth of a grain of this pure tetanus toxin would be a fatal dose for a man. Likewise, the manner of its action has been extensively studied, and there seems to be little doubt that the chief poison produced by the tetanus bacilli has a specific affinity for the ganglion cells of the anterior horns, with which it unites with such great firmness that it can not be readily separated again. One peculiarity of the tetanus toxin that attracted the attention of the early investigators was the length of time that elapses after its injection before the appearance of the first symptoms. If we inject diphtheria toxin or snake venom into an animal symptoms appear in a very few hours at the most, whereas in a guinea-pig it may be twenty-four or more hours before tetanic manifestations appear. This delayed action was very puzzling, and many hypotheses were advanced to explain it. During the past year what seems likely to be the correct explanation has been advanced by Meyer and Ransom.[2] From their experiments it would seem that tetanus toxin does not reach the spinal cord through the blood stream, but by slowly passing along the axis cylinders of motor cells from their terminations. Apparently the myelin sheath acts as a quite impervious membrane, and the toxin enters at the end of the neuron where it is not provided with this sheath. Sensory nerves do not transport the toxin to the cord. The toxin enters the nerve endings from two sources; the first is at the site of the infection, where the toxin is most concentrated, and this probably explains why tetanic spasms frequently begin in the vicinity of the infected part, or are most marked at this point. The rest of the toxin is taken up by the blood and lymph and distributed, to enter the motor nerve endings in small quantities all over the body, and by passing along the motor fibers to enter the cord diffusely, leading to the generalized spasms. The latent period that elapses after injection of the toxin before symptoms appear is occupied by the passage of the toxin along the motor fibers to the spinal cord; if the toxin is injected directly into the spinal cord symptoms appear at once. This also helps to explain the rather long incubation period observed in human tetanus, which is usually five to ten days. The first part of it is occupied by the growth of the bacteria and production of the toxins, the rest by the passage of the poison along the nerves to the cord. When the incubation period is brief it probably means that the bacilli are producing the toxin rapidly, so that in a very brief time enough is formed and transported to the cord to produce symptoms.

It also appears that other things that reach nerve cells follow the same route, including the tetanus antitoxin. Evidently, then, in a clinical case seen after tetanus has begun, the antitoxin injected at that time is a considerable distance behind the toxin in reaching the ganglion cell, which must have much influence in determining the results of the treatment. We will consider this factor at greater length when speaking of the antitoxin treatment of tetanus.

With the above facts concerning the pathology of tetanus at hand, let us consider, first,

THE PROPHYLAXIS OF FOURTH OF JULY TETANUS.

It goes without saying that the most desirable way to put an end to all this source of mortality is to prevent the wounds that begin the trouble. Abolition of blank cartridges and giant crackers would have reduced the number of deaths last year to less than twenty, and this is probably true of all other years. Display fireworks, such as Roman candles and rockets, caused but few tetanus infections, and so far as we could learn there were none from paper caps, torpedoes, and the small firecrackers. Surely these harmless forms of explosives ought to be sufficient for the entertainment of the children, and for "instilling patriotism" of at least equal value with the toy pistol and the cannon cracker. The work that physicians can do in their communities to lessen such evils of the Fourth is by no means inconsiderable, but having recently discussed this matter editorially[3] we shall limit ourselves here to discussing what can be done to prevent tetanus following such wounds as will be received this Fourth. As by far the most important wounds in regard to tetanus, and the most frequent, are those produced by blank cartridges, these are entitled to particular consideration.

Blank cartridge wounds form as deceptive a class of wounds as can be imagined. Usually they present simply a rather clean-cut perforation in the skin, about which are embedded many powder grains, for the wound is usually produced with the muzzle of the pistol but a few inches away from the skin. This is not a serious appearing wound, and if the boy's parents are not familiar with the danger he runs from tetanus they are likely to think that a simple dressing is all that he needs. And even if he is taken to a physician, too often the same opinion is expressed. History of several Fourths has shown that a very large proportion of the cases have occurred in boys who were seen by a physician soon after they were injured, and whose treatment had consisted solely in the application of a wet or dry dressing, or perhaps at the best a more or less ineffective attempt had been made to remove the wads. It is impossible, in the face of what we know about these wounds and their dangers, not to feel that many of these cases of tetanus would have been prevented by proper care of the injury when it was received.

The nature of the blank cartridge wound is primarily explosive. The chief damage is done beneath the skin,

2. Discussed editorially in THE JOUR. A. M. A., Jan. 30, 1904.

3. THE JOUR. A. M. A., May 21, 1904.

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and the distance to which the injury extends is almost unbelievable unless one is familiar with these injuries. The force of the explosion follows particularly along the tendon sheaths and fascia when the wound is in the hand, as it usually is, and it is by no means uncommon for powder and dirt entering a wound of the finger to be found near the wrist, driven there along the tendon sheaths. The size of the channel formed by the explosion is usually smallest near the skin, and enlarges for some distance into the deeper tissue until the wads are reached, and there spreads laterally in a mass of bruised and lacerated tissue, blackened by fire and powder. The penetrative power of the wads is not generally appreciated, but is well illustrated by a case reported by Allen[4] of a boy who shot himself in the abdomen with a blank cartridge, and the wad not only perforated the wall of the abdomen and entered the peritoneal cavity, but so damaged the bowel that fatal peritonitis resulted. When the wound is in the palm of the hand, one of the commonest sites, the wad may pass between the metacarpal bones, and effects of the explosion will nearly always be found beneath the skin of the dorsum of the hand.

The surgical treatment of the wound must, therefore, be most thorough. Merely opening the wound and picking out the wads, even if followed by drainage, is evidently inadequate; and if we take into account that tetanus spores, even in the test tube, are not killed by 5 per cent. of carbolic acid in ten hours, it is evident that no amount of washing of the wound with antiseptics will assure safety from tetanus infection. Safety demands that every part into which dirt from the surface can have been blown be cleaned out, and so packed that air can enter and wound secretions escape. This requires anesthesia and careful dissection. The greatest difficulty in most cases will probably lie in the objections of the parents of the boy, and this must be met with instruction as to the dangers and the necessities of the situation. Allen and Ludlow, in a series of ten cases treated in Cleveland last Fourth by such thorough measures as above described, had no tetanus, whereas five cases treated superficially and sent in from outside the hospital all developed tetanus. Similar results have been obtained by many others, and Bain reports a very instructive case from the Massachusetts General Hospital, in which tetanus bacilli were found in the contents of a wound treated in this manner, yet tetanus did not follow. The basis of the treatment rests on the biology of the germs; they can not be destroyed by antiseptics, but must be removed mechanically as far as possible, and the site rendered unfavorable for the growth of any that may remain by removing all dead and injured tissue, by preventing mixed infection, and particularly by giving access of air to all injured surfaces. Loose packing of the wound with iodoform gauze is the best method of securing the last-named condition. Cauterisation is not to be recommended generally, for we can not be sure in wounds of this nature that we reach all the bacteria, and if we fail in doing this we seal them in from the air most effectually. Most pernicious is the cauterization of the wound that has not been subjected to surgical exploration and cleansing.

Prophylactic administration of tetanus antitoxin is entitled to much serious consideration. Whatever may be said concerning the treatment of advanced tetanus by antitoxin, there is no room for doubt that as a preventive it is most efficient. We now possess numerous instances of its unquestionable value in checking epidemics of tetanus that have arisen in hospitals and maternities. Veterinary practice affords particularly convincing examples of its use in stables and veterinary hospitals where tetanus had become epidemic, and in which none of the protected animals was infected, whereas unprotected animals under the same conditions developed tetanus. During the past few years several physicians with large hospital practice have used the antitoxin prophylactically for Fourth of July injuries with complete success. Taylor of New York has treated many patients in this way without tetanus ever following in any.

We have been unable to learn of a single instance in which a person who had been given antitoxin soon after receiving a suspicious wound has developed tetanus. On the other hand, we have not learned of any harmful results from its injection into persons not infected with tetanus. It therefore seems safe to assume that a person who receives a prophylactic injection of tetanus antitoxin will be protected against tetanus, and will not be injured by the procedure. How necessary it may be to give antitoxin when the wounds are treated thoroughly by surgical means within a few hours after they are received may be a matter for discussion, but it can hardly be denied that its administration ensures almost absolute safety and will do no harm. In those cases in which the physician sees the wound only after one or more days have passed, or when, because of unconquerable objection on the part of the patients or the parents, or other reason, it becomes impossible to make sure both of the cleansing of the wound and the absence of any toxins already formed and absorbed, there can be no question of the necessity of the prophylactic use of antitoxin.

Tetanus antitoxin is prepared by the same firms that prepare diphtheria antitoxin, and also by the New York State Department of Health, and is on the market in a similar form. The chief difference is that the dose is not measured by units, but generally by cubic centimeters. For prophylactic purposes 10 c.c. should be injected in the same manner as diphtheria antitoxin, best in the vicinity of the wound if possible, and, according to Meyer and Ransom, best into the muscle if the wound is in a fleshy part. This should be done immediately after the wound is cared for if the antitoxin is at hand, but if not it can be used with profit at any time that it can be obtained within the next several days, since the period of incubation is so long. Where facilities for microscopic examination are available, it is advisable to have smears made of the wound secretions, and, if possible, cultures. While a negative finding does not assure an absence of bacilli, their demonstration would be indication for most vigorous use of antitoxin for several days, until the period of danger is past. In all cases in which the wound is or becomes infected with pus bacteria a second dose of the same size should be injected three or four days later. Only in simple cases with perfectly clean wounds should one be satisfied with a single injection. If the patient is quite young, under 8 years, 5 c.c. doses should be adequate.

CURATIVE TREATMENT OF TETANUS.

An apparent mortality of over 95 per cent. in the Fourth of July tetanus of 1903 indicates the futility of the methods generally employed. This class of cases seems to offer the worst prognosis of any of the forms of tetanus. Presumably the reasons for this are the youth of the patients and the unusually favorable conditions offered the bacilli by the blank cartridge wounds, so that their multiplication is rapid. It is also to be borne in mind that antitoxin was used in a considerable propor-

4. Cleveland Medical Journal, December, 1903.

tion of the fatal 95 per cent. On the face of these returns it may seem that antitoxin is useless, but there are many reasons for believing that better results are possible through its use than have yet been obtained without it.

In spite of its great experimental efficiency in animals, and its great prophylactic value, tetanus antitoxin as ordinarily administered has so far produced anything but a favorable impression as a curative agent after tetanus has once manifested itself. To be sure, large collections of figures have been made from the literature giving somewhat better results with antitoxin than without, but the value of such statistics is always questionable because patients with tetanus who recover are more likely to get into the literature than are those who die. On the other hand, the antitoxin has a very distinct and marked power of neutralizing tetanus toxin in the test tube, and also in the bodies of animals when the two substances are in the circulation at the same time. Evidently, then, since tetanus antitoxin can neutralize the toxin when once an opportunity for contact occurs, it has possibilities as a curative agent. The reasons for the usual failure and the possibilities for improvement rest on certain peculiarities in the mechanism of the action of tetanus toxin.

Diphtheria antitoxin possesses curative properties because a considerable part of the toxin is free in the blood, and also, perhaps, because the union of toxin and cells is not so firm that an excess of antitoxin is unable to withdraw the toxin from the cell to unite with the antitoxin. On the other hand, tetanus toxin when combined with nerve cells is either so firmly combined with them that it can not be separated by an excess of antitoxin, or else, as Meyer and Ransom's work indicates, the antitoxin may not reach the nerve cells in any considerable quantities for some time after it is injected.

It must be remembered that when a patient develops tetanic spasms, which is the earliest time at which tetanus can be diagnosed, the disease has been in progress from five to twelve days as a rule. During that time the bacilli have first multiplied, then produced toxin, and, lastly, probably requiring a considerable portion of the incubation period, the toxin has been diffusing along the axis cylinders of the motor nerves and accumulating in the motor ganglion cells until concentrated enough there to give rise to spasms. As before mentioned, there is reason to believe that many if not all substances that reach the body of a nerve cell enter chiefly at the extremities of its processes rather than from the periphery of the cell body proper, and Meyer and Ransom's work suggest that this is true also for tetanus antitoxin as well as for the toxin. This does not, of course, exclude the entrance of more or less of these substances more directly into the cell. Now, if antitoxin is injected subcutaneously into the body of a person with tetanus, it must, if this is true, follow the route taken by the toxin along the nerves perhaps two or more days before. There will, therefore, be at least that much interval between the time of injection of antitoxin and the time that it can reach the point where the toxin does its harm, during which time the nerve cell is saturated with the toxin and seriously damaged. As nerve cells have peculiarly slight power of repair, even if the antitoxin were then able to separate the toxin from the cell, fatal injury may have been done. A person who has manifested the classical symptoms is really in the last stages of the disease, a time when we would not expect much even of diphtheria antitoxin. It may be, then, that we shall not ever be able to realize much better results from tetanus antitoxin; but even at the worst it is distinctly indicated for the purpose of neutralizing the toxin that still exists free in the circulation, and thus prevent any further intoxication than already exists. Considering the facts stated before, concerning the pathology of the disease, and the sum of the experience of those who have attended cases of tetanus, the proper procedure in caring for a case of tetanus in which spasms have already appeared seems to be as follows:

As soon as possible after the patient is seen general anesthesia should be produced, and the wound cleaned out most carefully in order to put an end to further formation and absorption of toxin. This can be done effectively because in tetanus the bacilli are localised quite strictly in the wound area. Every shred of necrosed tissue must be removed, not to mention the wads, which are often two in number. The treatment will, of course, be similar in wounds from other causes. Free drainage and access of air should be secured by loose but complete gauze packing; there are some reasons for believing that iodoform gauze is of advantage. Care must be taken after the operation to secure proper sterilisation of the instruments and cloths contaminated by the wound, with due consideration for the resistance of tetanus spores. Boiling of instruments in soda solution for one hour is sufficient, and sheets, etc., may be sterilized before being handled by being soaked several hours in a tub containing 1/1,000 bichlorid solution, with enough hydrochloric acid to make ½ per cent., the acidity increasing by many times the bactericidal powers of the bichlorid.

Before consciousness returns, and perhaps even before the operation is begun, the antitoxin should be administered if available. By far the best results that have been reported seem to have been obtained by those who have injected the antitoxin into the spinal canal. As tetanus affects particularly the anterior horns of the spinal cord, this seems much more logical than the intracranial injection, and it has the great advantage of not adding a considerable operation to the already critical condition. The method used is to introduce the needle of the antitoxin syringe, preferably one of fairly large caliber, into the subarachnoid space by passing between the third and fourth lumbar vertebræ, in the usual manner followed in performing lumbar puncture. The syringe must not be attached to the needle at this time, but after the needle has entered the subarachnoid space the cerebrospinal fluid should be permitted to escape in quantity up to 150 drops, if that much will come. This is done to remove as much as possible of the cerebrospinal fluid, which is known to be highly toxic in tetanus, much more so than the blood serum. Then the syringe, containing 10-15 c.c. of antitoxin, should be attached to the needle and its contents slowly injected, allowing at least five minutes for the process of injection. No harm need be feared from the injection of this amount of fluid, for much more has been injected without causing any trouble whatever. This should be followed by injection with a fine needle of as much as possible into the substance of and along the course of a large nerve trunk, preferably the one supplying the injured part—of course, before the patient comes out of the anesthesia. This method is based on the newer observations above cited concerning the paths by which the antitoxin reaches the spinal cord. As these observations are new, this method has not been given extensive trial as yet, but in the four cases we have found recorded of its application all recovered.[5] Because of its

5. The first use of this method reported in America is by Ragan, Med. Record, May 21, 1904, and the patient, a boy injured with a blank cartridge, recovered.

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indication on experimental grounds it should by all means be given a thorough trial. And lastly, still another 10 c.c. may be injected in the vicinity of the wound. One need have no fears about using too much antitoxin. Elting[6] reports a case in which one patient recovered after receiving 80 c.c. of P., D. & Co.'s antitoxin, 100 units of Behring's dried antitoxin, and 1,050 c.c. of the New York State Department of Health antitoxin subcutaneously, besides 150 c.c. of the latter intraspinally—altogether over 1,300 c.c. (about three pints). In one period of twenty-four hours he injected 300 c.c. subcutaneously and 50 c.c. intraspinally.

After the operation and injections a subcutaneous saline infusion is desirable, because much fluid is needed by the patient, and it is difficult to feed a patient without adding to the sources of irritation. The patient should then be placed in a quiet, darkened room, with deadened floors, and complete plugging of the ears is advantageous. Every possible means should be taken to avoid any disturbance which may start up spasms. For this purpose morphin, chloral and bromids should be exhibited, sufficient, if possible, to keep the patient stupid. For the first twenty-four hours feeding should be limited as much as possible for the same reason, but after that time it needs to be pushed, as there is great exhaustion. The nourishment must be liquid, and usually has to be fed through a tube. Rectal alimentation is valuable if it can be given without too great disturbance.

Twelve hours after the first injection the patient should be again lightly anesthetized to avoid irritation and the process of withdrawing cerebrospinal fluid and introducing 10-15 c.c. of antitoxin again repeated, with also 10 c.c. subcutaneously, and, if thought desirable, more saline infusion. After this the subarachnoid injections, always preceded by the withdrawal of cerebrospinal fluid, should be repeated every twenty-four hours as long as indicated.

The above-described course of treatment can be realized fully, of course, only in places where the best of facilities are obtainable. Where antitoxin is not procurable the method will be much the same with the exception of the injection of the serum. As a substitute for antitoxin many European physicians, particularly the Russians, are using emulsion of fresh brain tissue, on the principle demonstrated by Wassermann that brain tissue has a specific affinity for tetanus toxin. He found that if brain emulsion and toxin were shaken together and then sedimented, the toxin would all be removed from the supernatant fluid and combined with the brain tissue in a harmless form. Experiments also indicate that a similar union can occur within the bodies of infected animals. The method employed is to remove, under aseptic precautions, the brain of a freshly-killed rabbit, pig or sheep, and make an emulsion of 10-15 grams (one-half ounce) in about 30 c.c. (one ounce) of sterile salt solution. After straining through sterile cheesecloth under slight pressure, this is injected subcutaneously, near the wound if possible, and repeated every day as long as indicated. This can merely be expected to neutralize toxin that has not entered the nervous system, but the Russians report excellent results—13 recoveries in 16 cases are reported by Krokiewicz.[7]

Baccelli's carbolic acid treatment is used by the Italians particularly, but has had quite general application. The results outside of Italy do not seem to have been particularly striking, but it has sufficient reputation to warrant its use when other methods are not available. It simply consists in injecting subcutaneously 1 per cent. carbolic acid solution, in sufficient quantity so that about five grains of the acid is given an adult during twenty-four hours. There seems to be remarkably little injury produced by the carbolic acid—as high as 144 grains a day having been used in the same way in plague.

Dr. S. A. Matthews[8] has published a method of treatment by a special salt solution that is very effective in experimental animals. The salt solution has much effect in washing materials out of the tissue cells, "cell catharsis," Matthews calls it, and produces a most profound diuresis. On this last account, at least, if for no other reason, it is to be recommended, and as the solution is entirely harmless it is well worthy of a thorough trial, particularly in the cases in which antitoxin is not available. It can readily be prepared by the following formula:

Sodii chloridi	gr. 55.5	1/200
Sodii sulphatis	gr. 135	1/80
Sodii citratis	gr. 61	1/264
Calcii chloridi	gr. 2	1/30
Aquæ	pinta 2	1000

This may be injected intravenously very slowly, not over 3 c.c. (1 dram) per minute, in quantities up to 500 c.c. (1 pint) at each infusion, which should be performed twice the first twenty-four hours, and once each succeeding twenty-four hours. The profound diuresis that this solution produces must have greater or less beneficial effect, and it is probable that the calcium reduces the muscular spasms.

In the great number of cases of Fourth of July tetanus that this country is presumably doomed to see this year, there is a great opportunity for therapeutic study. Probably much of our lack of success in the treatment of tetanus lies in the relatively rare occurrence of this disease, so that no one person is able to accumulate much personal experience with its management. If each isolated case, however, were carefully recorded the large total would undoubtedly afford valuable material on which to base future treatment. We therefore ask our readers who see cases of tetanus this year to send us clinical reports of the cases and their treatment, whether successful or not. If this is done by a considerable number, the reports can be profitably put together and analyzed, perhaps with much benefit.

Medical Saline Solution.—It is customary among physicians and physiologists to refer to the physiologic 0.6 per cent. salt solution as "normal saline solution." The *Pharmaceutical Journal* claims that this is liable to be confounded with the chemist's normal volumetric solution of sodium chlorid which has occasionally been supplied for physiologic purposes when normal saline solution was asked for. In one case the patient died; in the other, the result is unknown. Physiologic salt solution is usually wanted in a hurry, and it is likely that in the confusion such an error might be made. As the chemical normal saline solution is nearly ten times as strong as the physiologic solution, disastrous results are likely to happen. Since this chemical saline solution is but one of a series of volumetric solutions, each of which are styled "normal," chemists can hardly be asked to change the name. It would, therefore, be better for physicians not to use the term "normal" saline solution, as applied to the 0.6 per cent. solution of sodium chlorid for physiologic purposes, and to adhere carefully to the term "physiologic" or "medical" salt solution.—*Practical Druggist.*

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6. Albany Medical Annals, 1903, XXV, 105.
7. Klin. therap. Woch., Vienna, x, No. 6.

8. THE JOURNAL, Aug. 29, 1903, p. 565.

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THE ATLANTIC CITY SESSION.

The fifty-fifth annual session of the American Medical Association, held last week, was the most successful of any held in the history of the Association, not only in the number in attendance, but in the scientific work accomplished.

The attendance excelled that expected by the most hopeful. With the exception of one of the international medical congresses, it was probably the largest gathering of medical men ever held anywhere, the registration numbering 2,890. At the meeting in Atlantic City in 1900, 2,019 registered; at St. Paul in 1901, 1,806; at Saratoga Springs in 1902, 1,425, and at New Orleans in 1903, 2,006. Yet in spite of the number in attendance there was no evidence of crowding and no criticism in regard to accommodations. Atlantic City certainly proved herself capable of entertaining in a most satisfactory manner. The local committees of arrangement had done their work well, and are to be congratulated on the arrangements made and on the successful outcome of this magnificent meeting.

From a scientific point of view, no meeting ever surpassed it, whether we consider the meetings of special societies, international congresses, or what not. Every year some sections report having done very superior scientific work. This year from all the sections comes this report. It is not only the section officers and those especially interested in the sections who are saying this, but those who have never before taken an interest in the sections and who are more directly interested in other societies than in the sections of the American Medical Association are also acknowledging the superior scientific work at Atlantic City. The section officers deserve great credit for this result of their year's efforts. The officers of each section have vied with each other in trying to outdo what has been done in the past and to produce a program that should be superior scientifically to that of any preceding year and to that of any other special society. Those who know the amount of labor necessary to get up such a program and to make a section successful will appreciate that all the section officers have worked hard and have done their duty faithfully. They have all set standards for their successors that will be hard to surpass.

The symposia following the orations on Tuesday, Wednesday and Thursday evenings were something entirely new with this session, and they proved to be valuable as well as attractive. Never before have the general meetings been so well attended. The symposium on the first evening, which was devoted to a description of the research work that is being done in several institutions in this country, was a revelation to those who did not know how much of this work was being done. The symposium on Wednesday evening, on the relation of the medical services of the Government to the profession, was also most interesting and instructive. Such a symposium tends to bring the profession and the services together as nothing else can. We all realize, to a certain extent at least, what the U. S. Public Health and Marine Hospital Service and the Medical Department of the Army have done and are doing, but we have been very unfamiliar with the work of the Medical Department of the Navy. Surgeon Stokes, in his part of the symposium, showed that the medical officer of the Navy has a wider field of usefulness than is usually supposed. The last symposium, that of Thursday evening, was also valuable and instructive, and brought to the attention of the profession other work that is being done by the Government that is of special interest to medical men. While the building in which these meetings were held was a large one, standing room was at a premium on each occasion. President Musser deserves the thanks of the profession for having arranged for these symposia, and those who took part in them are also entitled to thanks for what they did to make them so successful.

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THE INFLUENCE OF HEREDITY IN CANCER.

Of all difficult problems in medical statistics, none offers more obstacles or shows more indecisive results than the figures compiled to ascertain the influence of heredity on the occurrence of malignant tumors. What with ignorance of patients concerning their family history, and the greater tendency among those with cancer to look up and know about the family record in this respect than among the non-cancerous, beside many other sources of error, there arise serious difficulties in the way of arriving at conclusions that are of real value. For this reason we find authorities differing most widely in their estimate of the importance of hereditary influence. There are those who are convinced that heredity is of great moment, and those who do not believe inheritance plays any part in the occurrence of cancer, beside still a third class, who, although recognizing inheritance as a factor in the etiology of cancer, do not consider it worthy of much attention. As cancer is practically never present at birth nor soon after, it evidently is not transmitted as a distinct disease, but at the most only a "predisposition" is inflicted on the offspring of cancerous progenitors. Now, while there can be no denying that occasionally we see instances in which an undue proportion of one family succumbs to cancer, yet there are other possible explanations than an inherited tendency. Advocates of the parasitic origin of cancer will suspect that the members of the family have been ex-

posed in common to the infectious agent, or possibly have infected each other, much as some explain the frequent occurrence of a high tuberculous morbidity in a given family. The "cancer house" endemics will also fall under the same charge. On the other hand, it may be claimed that such cancerous families may be accounted for by the laws of probabilities—that there are enough cases of cancer occurring throughout any population so that there are bound to occur at times certain groupings of the cases, which may at one time fall on a family, at another on a house, or a block, or a village.

The earlier investigators, as a rule, seem to have attached much importance to heredity. In 1857 Paget studied the histories of 411 patients, and came to the conclusion that the respective probability of hereditary transmission of cancer was 22.4 per cent. for those with relatives having cancer, and but 8.2 per cent. for those without cancerous relations. These figures have in the following years had much influence in favoring general belief in the hereditary taint. Virchow in his famous "krankhaften Geschwülste" in 1863 accepted as certain the existence of inherited predisposition to cancer. Lichtenstern's statistics from 1,137 cases showed a cancerous family history in 17 per cent. Roger Williams in 1892 found an apparent liability of cancer in those with cancerous relatives 10 per cent. greater than in those without cancerous relatives. Other statistics of similar periods do not give so high an inheritance tendency, figures of 8 per cent. to 10 per cent. being obtained by many, and, as similar figures have been obtained by inquiry into the history of patients without cancer, these writers, as a rule, question the existence of an inherited predisposition to cancer that is sufficiently marked to be of any practical importance.

Three thousand cases of cancer recorded in the Middlesex Hospital have been carefully investigated, and after proper eliminations, have been studied by Prof. Karl Pearson[1] by biometric methods, with construction of "skew curves," etc. From these, which are probably as valuable investigations as any recorded, it would seem that there is almost no appreciable difference in the incidence of cancer in those with and those without known cancerous relatives. Out of 2,368 female cancer patients, 359 had and 2,009 had not a family history of cancer. Out of 753 female patients with diseases other than cancer, 102 had and 651 had not a family history of cancer; or, approximately, 15.1 per cent. of family cancer among the cancerous against 13.5 per cent. among the non-cancerous patients in the same hospital. In considering these results, however, it must be taken into consideration that a certain number of these non-cancerous females might later develop cancer, thus making the figures slightly, but not greatly, different. This error may be offset by the greater likelihood of cancerous patients having acquainted themselves of other cases of cancer in their families than is likely among the non-cancerous. In any event, however, it may at least be concluded that inheritance is probably not as important a factor in cancer as some authorities have believed, and there is, indeed, a large possibility that it is really of little importance at all. Certainly there is no ground in these figures for people with cancerous relatives to be particularly alarmed concerning their liability to the same disease.

Another interesting fact brought out by these tables is that females have cancer at an appreciably earlier age than do the males, for among 2,368 female and 632 male cancer patients the mean average age of the onset of symptoms was, in the former, 47.832 years, and in the latter 53.358 years. The modal age, which is a more proper basis for considering the most common time of occurrence, gives an even greater difference, being respectively 46 to 55 years, a difference of 9 years in favor of the males. The question of the influence of tuberculosis in the family history on the occurrence of cancer was also investigated and found to amount to practically nothing; whatever difference was found, was slightly in favor of tuberculous families not having cancer.

1. Archives of the Middlesex Hospital, 1904.

THE CHEMISTRY OF THE URINE IN DISEASES OF THE PANCREAS.

In a recent editorial[1] we called attention to the important work of Robson and Cammidge on the diagnosis of pancreatic lesions. In view of the important work of Hewlett,[2] we deem it worth while to again call attention to this subject, and particularly to the chemistry of the urine in these cases.

The chemical aspects of Robson's cases were worked out by Cammidge, and a brief description of the test which he has devised will not be amiss. Starting out with the idea that fat-necrosis is the most constant and typical lesion of pancreatic disease, Cammidge reasoned that as a result of this there are probably secondary changes in the blood, and perhaps in the urine. Knowing that in fat-necrosis glycerin is set free and absorbed into the circulation, he endeavored to isolate this substance from the blood, but was unsuccessful in this on account of the small quantities of blood which could be obtained and the small quantity of glycerin in them. He then turned his attention to the urine, and was able in every case of pancreatic disease to isolate a substance which he regards as a glycerose. It is not our purpose to criticise here the chemical aspects of Cammidge's work, for, even though his chemical interpretation be erroneous, and there is good reason to believe that it is, the fact remains that a substance can be found in the urine of pancreatic disease which is not, with few exceptions, found in other diseases. Without going into detail as to the technic of his tests, it may be stated that they are relatively simple, the main test being based on the fact that glycerin, when heated with a dilute mineral

1. Jour. A. M. A., April 30, 1904.
2. Jour. of Med. Research, vol. xi, No. 2.

acid, produces a glycerose which can be thrown down in crystal form by phenylhydrazin. As a result of a large series of tests on cases of pancreatic disease and other conditions, Cammidge has been able to formulate quite accurately the applicability of his test, and also its limitations. He shows that the crystals found in pancreatic disease may also be thrown down in other conditions, as pneumonia, adenitis, and cancer, but that a certain modification of his original test, and certain peculiarities in the crystal solubility, serve to largely, though not entirely, eliminate these sources of error. The modification of his original test consists of a preliminary treatment of the suspected urine with perchlorid of mercury, which has the effect of preventing the crystal formation in cases of acute pancreatitis, but not in carcinoma of the pancreas and the non-pancreatic diseases associated with crystal formation. Tests to determine the time which is required for the dissolution of the crystals by dilute hydrochloric acid are also of great value in differentiating pancreatic conditions. Thus the crystals formed in cases of acute pancreatitis undergo solution in the acid much more rapidly than those formed in chronic pancreatitis, and the crystals formed in chronic pancreatitis dissolve more quickly than those formed in cancer of the pancreas. The author sets time limits on these changes, which he states are reasonably accurate, and also describes certain differences in the size of the crystals in different diseases, which, though less constant, are of value. In summing up, Cammidge concludes that the test, while open to fallacies, is of considerable value; in the absence of crystal formation, pancreatic disease is excluded entirely, and by following his directions, which are carefully given, the less absolute forms of the test are of considerable use.

The work of Hewlett, while purely experimental, also seems likely to prove of benefit in clinical cases. Like Cammidge, he started with the idea that fat-necrosis, being the most constant lesion of pancreatic disease, chemical changes in the body fluids should accompany it. Unlike Cammidge, he searched for the substance causing fat-necrosis rather than those resulting from it. His experiments had in view the possibility of finding in the urine in pancreatic disease, lipase, the fat-splitting ferment, a possibility already suggested by a single recorded case of Opie. In the urine of dogs in which he had produced an experimental pancreatic lesion, Hewlett was constantly able to detect lipase in appreciable quantities by testing the splitting power of the urine on ethyl butyrate. His work showed that lipase is absent, or present in very small quantities, in normal urine. As a result of various insults to the pancreas, but particularly as the result of acute hemorrhagic pancreatitis, lipase appears in the urine in easily demonstrable quantities. It is also found over a period of four or five days following ligation of the pancreatic duct. Both of these researches open up great possibilities in the way of diagnosis of pancreatic disease. Before we can definitely judge of their value, however, they must be tried in a very large number of cases. So far as we can judge at present, it seems likely that the lipase test will prove of most service in acute pancreatic conditions, and Cammidge's test in chronic conditions.

BACTERIA IN NORMAL TISSUE.

It is held that the organs of the body normally are sterile; in fact, this is the principle on which asepsis in surgery and medicine is supposed to be based. There has accumulated considerable evidence, however, that this apparently fundamental postulate must be essentially modified. It has been generally conceded that bacteria can pass through an ulcerated or abraded intestinal mucosa or other epithelial surface, but an intact surface is supposed to be an efficient barrier to the entrance of germs.

Adami[1] injected the colon bacillus intravenously into animals, and in 15 minutes these organisms were found in the cells of the liver and kidney. In two or three hours later the organisms appeared as diplococcoid forms and often arranged in the cells in a characteristic manner. This diplococcus appearance is due probably to the disintegration of the bacteria by the tissues of the body. Organisms may be seen frequently in the intestinal or mesenteric lymph glands and many hold that they are constantly present in these places. In cirrhosis of the liver Adami observed small granular bodies often in diplococcoid arrangement in the liver cells, which were at first taken for pigment. Later he found these bodies present in practically all livers taken at autopsy and considers them bacteria undergoing destruction. Bodies similar in appearance have been found in normal kidneys also.

Nicholls[2] describes a method of observing bodies which he considers bacteria in the mesentery of normal animals. After removing the epithelial cells on both surfaces by means of a swab, he cuts out a small piece of the mesentery under strict aseptic precautions. This tissue is then stained in carbo-thionin, cleared and mounted in balsam. About the cells in the mesentery he observes bodies often in diplococcoid form and arranged very characteristically around the nuclei of cells near the capillaries. These bodies he considers bacilli absorbed from the intestinal tract and modified by the digestive action of the tissues. He also reports cultures obtained from perfectly normal livers and kidneys of animals removed under the strictest aseptic precautions.

While these results require further confirmation and more extended investigation, the possibility of bacteria being taken into the body and distributed in various organs is certainly an interesting subject and may throw some light on the numerous infections which so often originate in some unexplained manner in various parts of the body. As Adami expresses it, the organs are not actually but only potentially sterile, the bacteria being

1. THE JOURNAL A. M. A., vol. xxxiii, p. 1269.
2. Jour. of Med. Research, vol. xi, No. 2.

carried to them continually, and in health undergo a rapid disintegration. If the resistance of the body is lowered or an excess of germs invade the organs, or if the virulence of the bacteria which normally enter the body such as the colon forms should increase, an infection might result. This may be the true explanation of the so-called cryptogenetic septicemias, terminal infections, idiopathic fevers and the like.

THE PATENT-MEDICINE MEN ACTIVE.

The patent-medicine men are doing their best to counteract the impression made on the public by the recent utterances of Mr. Bok in the widely circulated *Ladies' Home Journal*. Beside the suits that have been started against him and the journal, a circular has been sent out to druggists, and there are other evidences of increased activity on the part of the manufacturers. Undoubtedly this agitation will invigorate the opposition to the Pure Food Bill when it comes up before the Senate next session, and it behooves the medical profession to do its best to prevent these influences having their effect. If we are idle, the opposition is not. We may find that many votes have been pledged against the bill through the personal work of the patent-medicine manufacturers and others interested. We should relax no effort during the interim of the session of Congress to insure the passage of the Heyburn act, which was laid over at the last session of the United States Senate.

RATTLESNAKE ANTIVENIN.

Although the death rate from snake poisoning in this country is insignificant as compared with that of India and other tropical countries, snake bites are sufficiently frequent and sufficiently harmful to render a knowledge of snake venoms and their antidotes of great practical value. The variety of poisonous snake most widespread in America is the rattlesnake, and the recent studies of Flexner and Noguchi[1] deal mainly with this snake and its poison. When Calmette of Lille first published his classical researches on snake venom and antivenin it was thought that he had produced a substance which would neutralize all forms of snake poisoning. The researches of recent years have shown, however, that the poisonous principles in the venom differ in different serpents. Thus the active principle in cobra venom is a neurotoxin, while that of rattlesnake venom is a substance which destroys the endothelial cells lining the blood vessels, allowing the escape of the blood—technically speaking, a hemorrhagin. The effect of this hemorrhagin on the tissues is intensely destructive, and the extensive local necrosis resulting from its introduction has interfered up to the present with the immunization of animals to rattlesnake poison. Flexner and Noguchi have been able to overcome the disagreeable local effects and at the same time retain the hemorrhagin in a form in which it is able to set up reactive processes in the animal body, with the resulting production of an antivenin. These results give us every reason to believe that in the near future a serviceable rattlesnake antivenin will be on the market, in which case it is to be hoped that the popular but unscientific treatment of rattlesnake poisoning with massive doses of spiritus frumenti will be superseded.

1. University of Pennsylvania Medical Bulletin, 1903, xv, 380, and The Journal of Medical Research, vol. xi, No. 2, 1904.

THE RELATION OF SUBINFECTION TO PERNICIOUS ANEMIA.

While the gross and microscopic pathology of pernicious anemia has been cleared up to a large extent, especially by the work of Warthin, we still seem to be in the dark as regards the etiology of the disease. The view most commonly held is that which assumes the condition to be due to the absorption of bacterial toxins from the intestinal canal, a conception which is opposed by the well-known fact that, at any rate in the usual intestinal bacteria, the colon group, the toxin is not soluble, but is situated in the body of the bacillus itself. In a recent article Charlton[1] reports some very interesting work carried on in Adami's laboratory which has a bearing on this subject. The suggestion made by Adami in 1889 that pernicious anemia was probably due to latent infection or subinfection with intestinal bacteria formed the starting point of the research. Rabbits were injected at stated intervals with sublethal doses of colon bacilli obtained from the intestinal canal of other rabbits, and this was kept up for some time. It was noted that the rabbits so treated developed an anemia which in some respects resembled the pernicious anemia of man. If the colon injections were discontinued early the animals recovered, but if they were kept up the animals frequently developed in the late stages of the disease spinal cord symptoms which examination showed were due to degeneration affecting mostly the posterior columns of the cord. Similar lesions could not be induced by injecting rabbits with killed or filtered cultures of the colon bacilli. Cultures which had been acted on by pepsin did not differ in their action from ordinary living cultures. In discussing the significance of these observations, the author suggests that the fact that an anemia so closely resembling pernicious anemia can be produced experimentally by subinfection strongly supports the view that pernicious anemia is due to the same cause. Expressed in the author's own words, the mechanism would be "the repeated entry into the system of micro-organisms which, while they do not proliferate, as in infections proper, nevertheless, by their presence and by the products liberated in their destruction, have an eventual deleterious effect on the tissues."

1. Journal of Medical Research, vol. xi, No. 2, 1904.

Medical News.

[To give the minutes in this issue, the amount of space given to news, editorials and other departments is reduced.]

ILLINOIS.

Hospital Dedicated.—With elaborate ceremony the addition to St. Francis Hospital, Freeport, erected at a cost of $47,000, was dedicated by Archbishop Quigley, June 8.

Personal.—Dr. Richard D. Dugan has been appointed president of the Illiopolis board of health.——Dr. Lucian L. Leeds entered on his fiftieth year of practice in Lincoln, June 4.

Hospital Staffs Named.—The following are announced as the consulting and general staffs of the Rockford Hospital: Consulting staff—Drs. William H. Fitch, Albert S. Green, Walter

B. Helm, Frank H. Kimball, Daniel Lichty, and Henry Richings; general staff—Drs. Robert C. Bourland, Frederick W. Calkins, Sanford R. Catlin, Robert E. Coy, Thomas R. Culhane, Arthur F. Comings, William R. Fringer, J. Henry Frost, Roscoe G. W. Kinder and George L. Winn.

Chicago.

Dr. Davis Ill.—Dr. N. S. Davis, Sr., has been ill at his home for a week. His condition is rendered serious because of his advanced age.

Low Mortality.—For the week ended June 11, a total mortality of 420 was reported, an annual rate of 11.4 per 1,000. The lowest previous rate was 12.1 per 1,000.

Personal.—Dr. Alexander C. Wiener has gone to Europe for the summer.——Dr. Bartholomew F. Flanagan, first lieutenant and assistant surgeon, Illinois N. G., assigned Seventh Infantry, has resigned.——At the commencement exercises of the University of Illinois, June 8, the degree of doctor of laws was conferred on Dr. William E. Quine.

MARYLAND.

Crusade Against Variola.—The board of estimates has allowed the health commissioner of Baltimore $6,500 from the contingent fund to fight smallpox. This will be used chiefly to pay the extra vaccine physicians.

Many May Deaths.—During May 869 deaths were reported in Baltimore, 115 more than for May, 1901, 65 more than in May, 1902, and 116 more than in May, 1903. Tuberculosis caused 143 deaths; pneumonia, 90; heart diseases, 73; Bright's disease, 52; cancer, 46, and apoplexy, 45.

Personal.—Dr. Herbert L. Rich, professor of chemistry in the Western Maryland College, has been elected school physician and sub-master in chemistry in the Jacob Tome Institute, Port Deposit.——Dr. R. B. Whitridge, Baltimore, sailed to Germany June 2.——Dr. Leonard K. Hirshberg, Baltimore, has been awarded the Fisk Prize of $250 by the Rhode Island Medical Society for scientific research on the application of light as a therapeutic agent. There were over 200 competitors.——Dr. Edward W. Altvater, Upper Falls, has retired from practice on account of ill health, and will reside in Baltimore.——Dr. Arthur G. Barrett, health warden for the Fifteenth Ward, has resigned and has been succeeded by Dr. William Caspari, Jr.

MASSACHUSETTS.

The death rate of Boston for the week ended June 11 was at the annual rate of only 14.17 per 1,000, an unusually low record.

Personal.—Dr. George F. Dow, Reading, surgeon, and Dr. Herman W. Gross, assistant surgeon of the Sixth Regiment, M. V. M., have resigned.——Dr. Leonard Huntress has been appointed a member of the Lowell Board of Health.——Dr. Arthur F. Weston, house surgeon at Malden Hospital, was recently operated on for appendicitis, and is doing well.——Dr. Thomas J. Garrigan entertained the Brookfield Medical Club, May 18, in celebration of the twenty-eighth anniversary of his entry in practice.——Dr. Walter T. Bowers has been re-elected president of the board of trustees of Clinton Hospital.——Dr. David D. Brough has been made chief medical inspector of the Boston Health Board.

State Society Meeting.—The one hundred and twenty-third annual meeting of the Massachusetts Medical Society was held in Boston June 7 and 8. The Shattuck Lecture was by Dr. George S. Huntington, New York City, on "The relation of comparative anatomy to medical education and practice." In the annual discourse, Dr. Harold C. Ernst, Boston, offered some timely suggestions regarding modern medical education. About twelve hundred fellows sat down to the dinner in Mechanics' Hall, and later were addressed by Bishop A. H. Vinton of Western Massachusetts, and the Hon. Carroll D. Wright. Dr. H. D. Arnold outlined a plan by which the Boston Medical Library is to assume the functions of an academy of medicine. Dr. Arthur T. Cabot of Boston was elected president. Dr. George W. Gay, Boston, vice-president; Dr. Edward M. Buckingham, Boston, treasurer; Dr. Charles W. Swan, Brookline, corresponding secretary; Dr. Francis W. Goss, Roxbury, secretary, and Dr. Edwin H. Brigham, Boston, librarian. It was unanimously voted that a cordial invitation be extended to the American Medical Association to meet in Boston in 1906.

NEW YORK.

Personal.—Dr. Samuel B. Ward has been elected dean of the Albany Medical College, vice Dr. Albert Vander Veer, resigned.

New Hospital at Fordham.—The trustees of Bellevue and the Allied Hospitals have purchased a plot of ground equal to four city lots from the Jesuit Fathers of St. John's College. The erection of the hospital will be begun at once.

State Shows a High Death Rate.—The bulletin of the State Board of Health shows that in the past four months of 1904 there were 53,000 deaths in the state, 8,500 more than for the same months of 1903, and nearly 10,000 more than for the same period of 1902.

New York City.

Spinal Meningitis Decreasing.—The records show a great falling off in the mortality from this disease. Since March 1 there have been 700 deaths in greater New York and 411 in the Borough of Manhattan.

Personal.—Dr. Floyd J. Metzger has been appointed assistant in general chemistry, Dr. John D. Walker clinical lecturer in surgery, and Dr. Lucius W. Hotchkiss, clinical lecturer and instructor in surgery at the college of Physicians and Surgeons.——Dr. and Mrs. J. Duncan Emmett have returned to New York and expect to remain in the city until July 1.

New Building for Medical School.—The New York University has decided to purchase land adjoining the new Bellevue Hospital Medical College and to erect there a six-story building for clinics and laboratories. The first floor will be given up to the free dispensaries of the college, which treats more cases than any other clinic in the city excepting one. During 1903, 150,000 patients were treated.

Contagious Diseases.—For the week ended June 24, 1904, there were reported to the sanitary bureau 1,042 cases of measles, with 21 deaths; 398 cases of diphtheria, with 51 deaths; 321 cases of scarlet fever, with 18 deaths; 2 cases of smallpox; 86 cases of varicella; 407 cases of tuberculosis, and 170 deaths; 34 cases of typhoid fever, with 6 deaths and 63 deaths from cerebrospinal meningitis.

New York and Brooklyn Graduates.—President Schurman of Cornell University conferred degrees on a class of 55, June 8, and the doctorate address was delivered by Dr. William W. Keen, Philadelphia.——A class of 47 was graduated by the Long Island College Hospital, Brooklyn, June 2. The address was delivered by Rev. L. Mason Clarke, D.D., and the president, Dr. John A. McCorkle conferred the degrees.

The Tuberculous Colony on North Brothers Island.—This camp was established to determine the effect of sea air in the vicinity of New York on tuberculosis when the same mode of life is adopted that is followed in camps in other localities. Dr. Briggs reports that the results are very satisfactory and encouraging. Owing to the bad condition of the patients taken from the streets of New York there is some mortality, but where there had been any basis to work on, the results had exceeded all expectations.

PENNSYLVANIA.

Warrants for Meat Embalmers.—Dr. Warren, dairy and food commissioner, has secured 100 warrants to be issued against local meat dealers, charging them with the sale of chemically treated meats; 15 of the warrants have already been issued. Dr. Warren found that the samples examined were preserved with chemicals, the most poisonous of which were sulphites and coal-tar products.

Philadelphia.

Health Report.—There still continues to be marked and progressive decrease in contagious disease. There were 78 new cases of typhoid fever and 16 deaths, as against 102 cases and 19 deaths during the previous week. Only 4 new cases of smallpox were reported. This is the lowest number for many months. The deaths from all causes numbered 426, a decrease of 39 from the previous week, and an increase of 4 over the corresponding period of last year.

Pozzi, Treves and Hoffa in Philadelphia.—Prof. S. Pozzi, the eminent French surgeon and gynecologist, is the guest in this city of Dr. Charles P. Noble, who gave a reception and dinner in his honor June 11, which was largely attended.——Sir Frederick Treves, the eminent English surgeon, arrived in this city June 12, and is the guest of Dr. J. William White. He will sail for home on June 24, accompanied by Dr. White and his family.——Prof. D. Abert Hoffa held his second clinic in the Jefferson Hospital, June 6, for the benefit of members of the American Medical Association en route to Atlantic City.

Dedication of New Medical Laboratories.—The opening and

dedication of the new medical laboratories of the University of Pennsylvania were held June 11. The exercises were attended by physicians from all parts of the country, and many prominent European physicians were present. A special train conveyed a large contingent of members of the American Medical Association from Atlantic City. The address of presentation was delivered by J. Vaughan Merrick, member of the board of trustees, and formal addresses were made in the Laboratory of Pathological Histology by Dr. Henry P. Bowditch, professor of physiology, Harvard University; Prof. R. H. Chittenden, director of the Sheffield Scientific School, Yale University; Dr. George Dock, professor of medicine, University of Michigan, and Dr. Horatio C. Wood, professor of materia medica, pharmacy and therapeutics, University of Pennsylvania. In completeness of construction and equipment, the new building is without a rival. The erection of the laboratories has occupied four years, and has cost, exclusive of ground and equipment, $700,000.

GENERAL.

National Association for the Study and Prevention of Tuberculosis.—This body was formally organized at Atlantic City, June 6, with the following officers; President, Dr. E. L. Trudeau, Saranac Lake, N. Y.; Secretary, Dr. E. Jacobs, Baltimore.

American Proctologic Society.—At the annual meeting at Atlantic City the following officers were elected: President, Dr. J. Rawson Pennington, Chicago; vice-president, Dr. Lewis Hadlock, Philadelphia; secretary and treasurer, Dr. A. B. Cook, Nashville, Tenn.

American Medico-Psychological Association.—This association met in St. Louis, May 30 to June 2 and elected officers as follows: Dr. E. A. Burgess, Montreal, Canada, president; Dr. C. B. Burr, Flint, Mich., vice-president; Dr. C. A. Dent, New York, secretary and treasurer. A committee was appointed to formulate rules for expert witnesses in criminal cases in which the question of sanity is raised. San Antonio, Tex., was selected as the meeting place for 1905.

American Climatological Association.—The thirty-eighth annual meeting of this association was held in Philadelphia June 2-4. Over 50 members were present, and the meeting was one of the most successful and interesting in the history of the association. The following officers were elected: President, Dr. W. F. R. Philips, Weather Bureau, Washington, D. C.; vice-presidents, Drs. S. G. Bonney, Denver, and S. D. Risley, Philadelphia; secretary and treasurer, Dr. Guy Hinsdale, Hot Springs, Va.

New Society on Use of Alcohol.—The Association for the Study of Inebriety, and the Medical Temperance Association combined at Atlantic City and formed a new society called the American Society for the Study of Alcohol and Narcotic Drugs. The following officers were elected: Honorary president, Dr. N. S. Davis, Chicago; active president, Dr. W. S. Hall, Chicago; vice-presidents, Dr. S. D. Mason, Brooklyn; Dr. C. H. MacNicholl, New York City; Dr. Frank T. Reese, Courtland, N. Y.; secretary, Dr. T. D. Crothers, Hartford, Conn.; corresponding secretary, Dr. W. T. Steward, Battle Creek, Mich.; treasurer, Dr. G. W. Webster, Chicago. The *Journal of Inebriety* was made the organ of the new society.

Marriages.

GEORGE I. CASON, M.D., to Miss Mary Ross, both of Colusa, Cal., May 28.

WALTER D. PRICE, M.D., to Miss Dolores Gill, both of Brooklyn, June 1.

EDWIN L. BERGE, M.D., of Buffalo, N. Y., to Miss Emily B. Hastings, June 1.

CHARLES LEE NOLLAU, M.D., to Miss Freda Weber, both of Louisville, June 15.

MAURICE WARFIELD, M.D., to Miss Mary Campbell Murdoch, at Baltimore, June 8.

AUGUST C. BUSCH, M.D., Cincinnati, to Miss Bering of Fayetteville, Ohio, June 8.

EUGENE R. LEWIS, M.D., to Miss Elizabeth Bradley, both of Dubuque, Iowa, June 16.

JESSE WOOTON WILLIAMS, M.D., to Miss Jane Grey Thrift, both of Baltimore, June 1.

HENRY A. POLKINHORN, M.D., to Miss Grace Elizabeth Butler, both of New York, June 1.

S. DENNY WILSON, M.D., Easton, Md., to Miss Anna E. Voit, at Tunis Mills, Md., June 1.

WILLIAM THOMAS WILLIAMS, M.D., to Miss Ida Lelia, both of Natchitoches, La., June 15.

ALBERT WILLIAM MYERS, M.D., Milwaukee, to Miss Mary Lukens of Philadelphia, June 8.

JOSEPH H. LIEBKEMANN, M.D., to Mrs. Minnie M. Ferguson, both of Memphis, Tenn., June 5.

JOHN K. HOOPER, M.D., Camden, Maine, to Miss Carrie Luella Forbush of Machias, Maine, May 25.

GREER HILL BAKER, M.D., Cincinnati, to Miss Mildred Louise Southgate of Newport, Ky., June 1.

FREDERICK J. WALTER, M.D., Kramer, Ind., to Miss Idelle Kidder of Terre Haute, Ind., June 2.

HARRY M. LAMBERSON, M.D., Connersville, Ind., to Miss Mayme Henry of Columbus, Ind., June 8.

TABER R. WASHBURN, M.D., Donnellson, Iowa, to Miss Christina H. Hanson of Keokuk, Iowa, June 1.

ARTHUR E. THEELFELD, M.D., Wheatley, Ky., to Miss Pauline Winston of Idlewood, Ky., June 8.

GROSER T. HOWARTH, M.D., Hallsville, W. Va., to Miss Josephine Frances Stone of Chicago, May 31.

WILLIAM MARCY GRATIOT, M.D., Mineral Point, Wis., to Miss Emily Edwards Cady of Dubuque, Iowa, June 1.

CLIFFORD WALTER ALLISON, M.D., New York City, to Miss Maud S. Speirs of Mount Vernon, N. Y., June 1.

JACOB J. KENNEDY, M.D., Frankford, Mo., to Miss Lola Jacobs of Bowling Green, Mo., at St. Louis, June 1.

ALBERT COULSON BUCKLEY, M.D., Philadelphia, to Miss Harriet Bailey of Covington, Ky., in Cincinnati, June 1.

HAROLD ROY LUCAS, M.D., Grandin, Mo., to Miss Alberta Bracken of Wallace, Kan., at Kansas City, Mo., May 24.

DAVID R. MOORE, M.D., Stanley, N. B., to Mrs. Annie E. Young of Sioux Falls, S. D., at Vanceboro, Maine, May 31.

WILLIAM LAWSON LITTLE, M.D., first lieutenant and assistant surgeon, U. S. Army., to Miss Evelyn Ryall of Chattanooga, Tenn., June 1.

Deaths.

Charles Mann, M.D. Medical College of Ohio, Cincinnati, 1861, a member of the American Medical Association for 40 years, of the Kentucky State Medical Society and of the Jessamine County Medical Society; surgeon in the Confederate service during the Civil War; one of the oldest and most prominent physicians of that section of Kentucky, died at his home in Nicholasville, June 1, from paralysis, after a brief illness, aged 67. The county medical society, at a special meeting, passed resolutions of eulogy and regret.

Joshua C. Noyes, M.D. Rush Medical College, Chicago, 1863, a member of the American Medical Association; surgeon of the Thirty-second Wisconsin Volunteer Infantry in the Civil War; one of the oldest and most respected citizens of Oshkosh, Wis., died at St. Mary's Hospital in that city, June 7, a day after amputation of the right leg near the hip joint for osteosarcoma, aged 64. The Oshkosh Medical Club, at a special meeting, June 8, adopted resolutions of regret.

George M. Stiles, M.D. University of Pennsylvania Medical Department, Philadelphia, 1866, of Conshohocken, Pa., died, June 9, at the University Hospital, Philadelphia, to which he had been removed after being stricken with apoplexy two days before. He was a member of the American Medical Association, the Medical Society of the State of Pennsylvania, the Montgomery County Medical Society, and a trustee of the State Hospital for the Insane, Norristown.

Lawrence G. Andrews, M.D. Cleveland Medical College, 1854, for many years a well-known physician of Youngstown, Ohio; assistant surgeon of the Twenty-fifth Ohio Volunteer Infantry in the Civil War, died at the Western Pennsylvania Hospital for the Insane, Dixmont, where he had been a patient for 20 years, June 1, aged 75.

Elmer A. Johnston, M.D. Rush Medical College, Chicago, 1897, of Danville, Ill., a member of the American Medical Association, and of the Vermilion County Medical Society, died at the home of his parents in Champaign, Ill., June 3, from malignant disease of the face, after an illness of one year, aged 36.

Sebatan Jordan, M.D. University of Pennsylvania, Philadelphia, of Beaumont, Texas; formerly preceptor in anatomy in

the University of Georgetown Medical Department; surgeon in the U. S. Army, and during the Civil War in the Confederate Army, died at the Sisters' Hospital, Beaumont, May 31, aged 77.

Myron H. Andrews, M.D. University of Buffalo (N. Y.) Medical Department, 1847, for many years surgeon of the Michigan Central Railroad at Detroit, and city physician from 1868 to 1891, died at his home in Detroit, June 3, from pneumonia, after an illness of four weeks, aged 87.

Frederick L. Henkel, M.D. University of Pennsylvania, Philadelphia, 1879, of Staunton, Va., died at Lebanon Church, near New Market, Va., May 21, from the effects of an overdose of morphin, aged 50. He had been in ill health for eighteen months.

John M. Jackson, M.D. University of Louisville Medical Department, 1860, died at his home in Columbus, Ky., May 31, from Bright's disease, after a lingering illness, aged 76. He served as surgeon in the Confederate Army during the Civil War.

The Public Service.

Army Changes.

Memorandum of changes of station and duties of medical officers, U. S. Army, week ending June 11, 1904:

Phillips, Jno. L., surgeon, reports as in temporary charge of C. S. O., Hawaiian Department of the East, Governor's Island, N. Y. Purd. Clyde B., asst.-surgeon, under orders to report June 13, 1904, at Washington, D. C., for examination for promotion.

Jones, Geo. W., asst.-surgeon, reported for temporary duty at Fort Jay, N. Y., left Fort Adams, R. I., June 2, under Department order.

Woodruff, Charles E., surgeon, granted thirty days' leave, permission to apply for two months' extension on surgeon's certificate of disability.

Torney, Geo. H., deputy surgeon general, avails himself of thirty days' leave of absence.

Dale, Frederick A., asst.-surgeon, granted thirty days' leave of absence.

Reynolds, F. P., asst.-surgeon, relieved from duty at U. S. Army General Hospital, Washington Barracks, D. C., to take effect about July 1, 1904, and ordered to the Presidio of San Francisco for duty.

Harnett, Eugene H., and Mathews, Geo. W., asst.-surgeons, ordered to report at Army Medical Museum, Washington, D. C., at such times as may be required by Major Wm. H. Arthur, surgeon, president examining board, to determine their fitness for advancement.

Watkins, Victor E., contract surgeon, relieved from duty at Fort Miley, Cal., and assigned to duty at Fort Apache, Ariz.

Whitney, Walter, contract surgeon, granted leave of absence for two months from the Philippine Division, with permission to visit the United States, and also to apply for an extension of one month.

McConathy, Herbert M., contract surgeon, granted leave of absence for three months from the Philippine Division, with permission to visit the United States.

Brown, Polk D., contract surgeon, granted leave of absence for three months from the Philippine Division, with permission to visit the United States.

Love, Joseph W., contract surgeon, granted leave of absence for two months from the Philippine Division, with permission to visit the United States and to apply for an extension of one month.

Wilkins, Archibald M., contract surgeon, granted leave of absence for three months from the Philippine Division, with permission to visit the United States.

Chase, Alpha M., contract surgeon, left Fort Reno, Okla., June 3 on leave of absence for three months under Department order.

Many, Harry C., contract surgeon, left Fort Riley, Kan., June 2 on leave of absence for two months under Department order.

Reddy, Joseph W., contract surgeon, is now at his home, Boston, Mass., on leave of absence for two months from the Philippine Division.

Jones, George E., contract surgeon, recently returned from Philippine service, and now at his home, Rushville, Ind., has been granted leave of absence for one month.

Hegne, Gustave L., contract surgeon, now on leave of absence from the Department of California; has been granted an extension of one month.

Brown, Henry L., contract surgeon, stationed at Columbus Barracks, Ohio, has been granted leave of absence for fourteen days, with permission to apply for an extension of seven days.

Stoney, Randall C., contract surgeon, returned to duty June 8 at Fort Hamilton, N. Y., from leave of absence.

Navy Changes.

Changes in the medical corps, U. S. Navy, for the week ending June 11, 1904:

Guthrie, J. A., P. A. surgeon, detached from the *Franklin*, and granted leave for three months.

Hart, G. G., A. A. surgeon, detached from duty with recruiting party No. 5 and ordered home and to wait orders, from June 4.

Sellers, F. B., A. A. surgeon, ordered to the *Franklin*.

Fauntleroy, A. M., asst.-surgeon, ordered to the *Lancaster* June 22.

Angwin, W. A., asst.-surgeon, appointed asst.-surgeon, with rank of lieutenant, junior grade, from June 2, 1904.

Rees, J. W., medical director, detached from the Naval Museum of Hygiene and Medical School, Washington, D. C., and ordered to duty with the Isthmian Canal Commission.

Blanco, F. M., asst.-surgeon, detached from the naval station, Police, P. I., and ordered to the naval station, Olongapo, P. I.

Kite, I. W., surgeon, orders detaching from the *Maine* revoked; ordered to continue duty on the *Maine*.

Smith, C. G., asst.-surgeon, ordered to the Naval Hospital, Mare Island, Cal., June 23.

Abekin, F. G., asst.-surgeon, detached from the naval station, San Francisco, and ordered to the *Adams*.

Nelson, Jr., H. T., A. A. surgeon, detached from the Naval Hospital, Sitka, Alaska, and ordered home and to wait orders.

Miller, J. T., A. A. surgeon, detached from the Naval Hospital, Mare Island, Cal., and ordered to the Naval Hospital, Sitka, Alaska.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, Public Health and Marine-Hospital Service, during the week ended June 10, 1904:

SMALLPOX—UNITED STATES.

California: May 21-28, 4 cases.
Florida: Jacksonville, May 27-June 4, 1 case.
Georgia: Macon, May 28-June 4, 5 cases.
Illinois: May 1-31, Bellville, 9 cases; East Liverpool, 23 cases, 1 death; Chicago, May 28-June 4, 7 cases.
Iowa: Dubuque, May 28-June 4, 1 case, 1 death.
Louisiana: New Orleans, May 28-June 4, 11 cases.
Maine: Machiasport, May 1-31, 8 cases.
Maryland, Baltimore, May 28-June 4, 2 cases, 1 death.
Michigan: May 28-June 4, Detroit, 1 case; Grand Rapids, 1 case; at 101 localities, present.
Nebraska: Omaha, May 21-28, 2 cases.
New Hampshire, Manchester, May 28-June 4, 27 cases.
New York: New York City, May 28-June 4, 2 cases.
Ohio: May 28-June 4, Dayton, 17 cases, 1 death; Toledo, 6 cases.
Pennsylvania: May 28-June 4, Johnstown, 3 cases; Philadelphia, 10 cases, 5 deaths; Pittsburg, 3 cases.
South Carolina: Charleston, May 28-June 4, 2 cases.
Tennessee: May 28-June 4, Memphis, 14 cases; Nashville, 12 cases.
Wisconsin: Milwaukee, May 28-June 4, 7 cases.

SMALLPOX—INSULAR.

Philippine Islands: Manila, April 16-30, 12 cases, 4 deaths.

SMALLPOX—FOREIGN.

Austria: Prague, May 7-14, 4 cases.
Belgium: Antwerp, May 15-21, 5 cases, 4 deaths.
Brazil: Bahia, April 30-May 7, 4 cases; Rio de Janeiro, April 17-May 8, 147 cases, 96 deaths.
Canada: Winnipeg, May 21-28, 2 cases.
China: Shanghai, April 16-30, 3 cases, 14 deaths.
Colombia: Barranquilla, May 9-16, 2 deaths.
France: Paris, May 14-21, 10 cases, 1 death.
Great Britain: May 14-21, Cardiff, 5 cases, 1 death; Dundee, 1 case; Glasgow, 14 cases, 2 deaths; Leeds, 2 cases; London, 18 cases; Newcastle-on-Tyne, 8 cases; Nottingham, 3 cases, 1 death; Leith, May 7-14, 1 case.
India: Calcutta, April 23-May 7, 11 deaths; Karachi, May 1-9, 10 cases, 4 deaths.
Mexico: City of Mexico, May 22-29, 16 cases, 8 deaths; Torreon, May 23-29, 2 cases, 2 deaths.
Netherlands: Rotterdam, May 14-28, 5 cases.
Russia: Moscow, May 7-14, 5 cases, 1 death; Odessa, May 7-21, 1 case, 2 deaths.
Spain: Barcelona, May 10-30, 9 deaths.
Straits Settlements: Singapore, April 9-16, 1 death.
Turkey: Alexandretta, May 14-21, 1 death; Beirut, April 30-May 14, present; Constantinople, May 15-22, 4 deaths.

YELLOW FEVER.

Brazil: Rio de Janeiro, April 17-May 8, 11 cases, 8 deaths.
Mexico: Vera Cruz, May 23-28, 1 case, 1 death.

CHOLERA.

India: Calcutta, April 23-May 7, 203 deaths; Madras, April 23-29, 1 death.

PLAGUE—INSULAR.

Philippine Islands: Manila, April 16-30, 8 cases, 8 deaths.

PLAGUE—FOREIGN.

Africa: Cape Colony, April 23-30, 1 case.
Brazil: Rio de Janeiro, April 17-May 8, 4 cases.
China: Amoy, June 4, present.
India: Karachi, April 23-May 8, 203 cases, 176 deaths.

Association News.

LEWIS S. M'MURTRY.

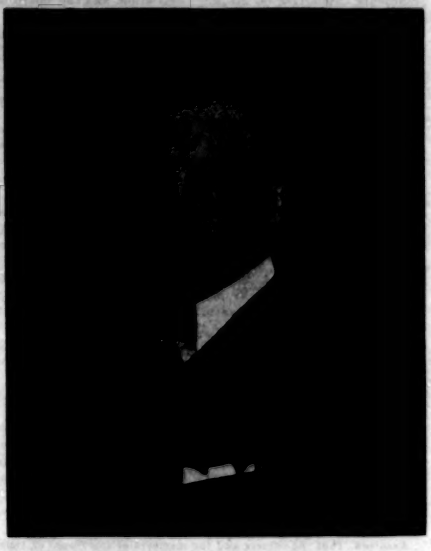
The President-elect of the Association.

BIOGRAPHICAL SKETCH.

Lewis S. McMurtry, President-elect of the American Medical Association, was born and reared in Central Kentucky, and has lived continuously in his native state. His family were among the early settlers of Kentucky, and came of Scotch ancestry. He is 52 years of age. He was educated at Center College at Danville, where he received the degree of A.B. when 19 years of age; three years later the same institution conferred on him the degree of A.M. in course. After three years'

pupilage, he was graduated from the medical department of the Tulane University of Louisiana, at New Orleans, and served the year following graduation as one of the chiefs of clinics in the Charity Hospital of that city. Returning to Kentucky, he entered on the practice of medicine at Danville, Ky., where he continued in practice several years. In 1881 he was elected to the chair of anatomy in the Kentucky school of medicine at Louisville, but did not remove to Louisville permanently until several years later. In 1883 and 1884 he pursued special studies in pathologic histology and clinical surgery in New York and Philadelphia, and in 1889 he spent several months in Europe studying especially gynecology and abdominal surgery. In 1889 he removed his residence permanently to Louisville, and has since devoted himself exclusively to the practice of gynecology and abdominal surgery. He has been prominently identified since that time with the advancement of that important department of surgery.

Dr. McMurtry has for ten years past occupied the chair of gynecology and abdominal surgery in the Hospital College of Medicine in Louisville, and is a member of the attending



LEWIS S. McMURTRY.

staff of the Louisville City Hospital, surgeon to the Sts. Mary and Elizabeth Hospital, and to the Gray Street Infirmary. He is a member of the American Surgical Association. He was president of the Kentucky State Medical Society in 1889, and was chairman of the committee which erected a monument to the memory of Ephraim McDowell, "the father of ovariotomy." He was president of the Southern Surgical and Gynecological Association in 1891, and of the American Association of Obstetricians in 1893. He has been an active member of the American Medical Association ever since his graduation in medicine, and was a member of the first Board of Trustees, rendering efficient service in founding and establishing THE JOURNAL.

Dr. McMurtry has been a frequent contributor to medical literature. His contributions are to be found mostly in the transactions of the societies with which he is connected, and relate to surgical subjects. He contributed the chapter on the "Surgery of the Uterus" to the "International Text-Book of Surgery," and made numerous contributions to Reed's "Text-Book of Gynecology." He is an honorary member of the Philadelphia Obsterical Society; an ordinary fellow of the Edinburgh Obstetrical Society, and a fellow of the British Gynecological Society. He is one of the founders of the International Periodical Congress of Gynecology and Obstetrics.

UNVEILING EXERCISES OF THE RUSH MONUMENT.

Held in Washington, D. C., June 11, 1904.

The imposing statue of Dr. Benjamin Rush, perpetuating in bronze the likeness and memory of the great physician and philanthropist, was unveiled Saturday, June 11, 1904, at 5 p. m., in the presence of the President of the United States, members of his cabinet, prominent officers of the Army and Navy, and members of the American Medical Association and the profession generally.

Description of the Monument.

The statue is of heroic size and stands in the grounds of the United States Naval Museum of Hygiene and Medical School, at the foot of Twenty-third Street, N. W., formerly the site of the old Naval Observatory. It stands on a base of Indiana limestone, with granite steps leading up thereto. The height of the pedestal is ten feet. There are four bas relief panels on the several sides of the pedestal. The one in front bears the inscription: "Dr. Benjamin Rush, physician and philanthropist, 1745-1813." The three remaining panels typify the important features of the physician's life. One panel bears crossed swords and a wreath, and beneath is inscribed, "Signer of the Declaration of Independence." Another panel bears a scroll, a pen and wreath, with the inscription, "First American Alienist." The remaining panel bears the Caduceus, or staff of Mercury, with aspa coiled about it. The Caduceus is the emblem of medicine recognized in the United States Army. This panel bears a favorite quotation by Dr. Rush: "Studium sine calamo somnium." Mr. Louis R. Metcalf was the architect of the statue, Mr. R. H. Perry, the sculptor, and J. W. Pucey, the builder. The bronze work was done by the Henry Bonnard Company of New York.

Address of President Musser.

Dr. John H. Musser, president of the American Medical Association, in opening the exercises, spoke as follows:

In keeping with that spirit which prevails in all nations, and all institutions advanced in thought, possessed of ideals, reverent of ideas, the American Medical Association naturally would wish to perpetuate in bronze those heroes who by word and deed represented their aspirations and feelings. It is not to be wondered at that he whose monument is to be dedicated to-day should have been one of the first selected. Heroic of action, noble of motive, humane in instincts, his career well represents much of the best of our profession. It can not be gainsaid that he was not without blemish; it can not be gainsaid that while motive should not be impugned, certain action must not be condoned. It is all the more a tribute to the transcendant force of the man, that notwithstanding many weaknesses, he stands among the first of the giants of the revolutionary and formative periods of our government. It is a tribute to the breadth of mind and liberality of feeling of the medical profession of the day that shadows are not allowed to blur the picture but rather to project in clearer outline the great elements of his character.

Such catholicity, it may be said, followed, and as surely follows as the night the day, devotion to the rigid morals of science which has characterized our labors the past quarter of a century.

To the end that our desires should be consummated the American Medical Association placed in the hands of a committee, styled the Rush Monument Committee, the methods to be followed. This committee has had many distinguished members, but without invidious distinction, it is due him to say that to Commodore Gibon of the Medical Corps of the Navy we owe more than to any one individual for arousing sentiment and stimulating action. To him we owe that process of education which is requisite in great movements, the resultant force of which will have unbounded sway, as may be illustrated by the ready response of the profession to the Walter Reed Memorial Association.

The committee, therefore, who have had the conservation of

this trust in their care the past four years have the great satisfaction of seeing its fruition, not alone in the completion of the monument, but also in the development of a purpose and sentiment which bodes well for future similar action.

Mr. President, ladies and gentlemen, as representative of the American Medical Association, and through it, the medical profession, official sanction is hereby given by these simple services to the dedication of this monument. Stimulated by his thought and deeds, may we so live that for all time we can show by thought and act that in placing this tribute to a scholar, a patriot, a physician in the trust of the nation we are honoring ourselves far more than we can ever honor him.

The Oration by Dr. Wilson.

At the close of President Musser's remarks, Dr. J. C. Wilson was introduced, and delivered the oration on Benjamin Rush. (This appears in THE JOURNAL this week, page 1601.)

The statue was unveiled by Mr. Metcalf, amid great applause, the Marine Band playing "My Country 'Tis of Thee."

Address by President Roosevelt.

At the conclusion of the oration by Dr. Wilson, President Musser introduced the President of the United States, who spoke as follows:

Mr. Chairman, Ladies and Gentlemen: I accept on behalf of the nation the gift so fittingly bestowed by one of the great professions, this statue of a man who was eminent, not only in that profession, but eminent in his service to the nation as a whole. We have listened to an interesting study of the life of Benjamin Rush, and it must surely have been brought home to each of us here that his career derives its peculiar significance in part from the greatness of his pioneer work as a physician on this Continent, in part from the way in which he combined with arduous and incessant labor in his profession the greatest devotion even outside of that profession to the welfare of his fellow countrymen. Here at the National Capital it is earnestly to be hoped that we shall finally see commemorated, as the services of Rush are henceforth to be commemorated by this statue, all the great Americans who, working in widely different lines, by the aggregate of their work make the sum of achievement of America in the world. (Applause.)

I thank and congratulate you of the medical profession today on what you have done, not merely in commemorating the foremost pioneer in your own profession, but in adding at the National Capital a figure to the gallery of great Americans who should be here commemorated. (Applause.)

As you said, Doctor, Benjamin Rush was not a specialist in the modern sense. He could not be. There were not any specialists in the modern sense, as you pointed out. There was no possibility of there being such. But I would like, in this age of specialization, to say one word in the way of a short sermon to eminent specialists. To-day no specialist in a Democratic country like ours can afford to be so exclusively a specialist as to forget that one thought of his duty, namely, his duty to the general public and to the State. (Applause.)

Where government is the duty of all, it of course means that it is the duty of each, and the minute that the average man gets to thinking that government is the duty of somebody else, that minute the republic will begin to go down. It is a fortunate thing for our country that we should have before us the lives of men like Rush, who could take a part in our public life as distinguished as is implied by having been a signer of the Declaration of Independence, and yet do it without a particle of neglect of the man's own proper duties. (Applause.)

I would earnestly plead, in addressing this audience, and especially the members of the high and honorable profession which has given this gift to the nation, that you never for one moment allow yourselves to forget that the well-being of the Republic ultimately depends on the way in which, as a rule and habitually, the best citizen of the Republic does his duty to the State (applause); and that we have a right not merely to expect but to demand from our hardest worked men, from the leaders of the great professions, the full performance of that public service, which consists in a zealous, intelligent, and fearless performance of the ordinary duties of public life by the ordinary private citizen. (Applause.)

In conclusion, I thank you for having presented to the National Capital, to the people of the United States, the statue of a man who was foremost as a leader and a pioneer in his profession, who was a great physician and a great American. (Loud applause.)

AMERICAN MEDICAL ASSOCIATION

Proceedings of the Fifty-fifth Annual Session, held at Atlantic City, N. J., June 7-10, 1904.

(Continued from Page 1582.)

OFFICIAL MINUTES—HOUSE OF DELEGATES.

Third Meeting—Tuesday, June 7.

Dr. John B. Roberts of Philadelphia, in the absence of President Musser, was elected temporary chairman.

The House was called to order at 2:15 p. m.

Resolutions on National Incorporation.

Dr. T. J. Happel presented the following resolutions as summarizing the action of the joint committee (see page 1581), which consisted of the Committee on National Legislation, the Reference Committee on Medical Legislation, and the Board of Trustees, with reference to national incorporation:

Resolved, That the Board of Trustees be, and hereby is, instructed to make such changes in the present charter as may become necessary or desirable owing to changes which have been made in the Constitution and By-laws; and

Resolved, That the Committee on National Incorporation, together with the Board of Trustees, be, and hereby is, instructed to secure from Congress, if possible, a suitable and desirable national charter.

New Constitution and By-Laws Adopted.

After some discussion action on these resolutions was deferred until after the report of the Reference Committee on Constitution and By-laws, which was read by Dr. M. L. Harris, chairman (see page 1581).

At this juncture President Musser arrived and took the chair.

At the conclusion of the report Dr. J. N. McCormack, Kentucky, moved the adoption of the report of the committee, which was seconded by several.

Dr. J. W. Grosvenor, Buffalo, moved to amend Article IX, Section 1, of the report, by inserting the word "four" instead of "two," so that the section may read "four vice-presidents" instead of "two."

This amendment was accepted by the committee, after which the original motion of Dr. McCormack to adopt the report of the committee as amended, was put and carried.

Plan for National Incorporation Adopted.

After the adoption of the report of the Committee on Constitution and By-laws, Dr. Happel re-read the resolutions in regard to instructions to the Board of Trustees regarding the changes in the present charter and national incorporation, which were adopted.

Dr. John B. Roberts, Philadelphia, offered the following resolution, which was adopted:

Resolved, That the officers and the members of the House of Delegates of the American Medical Association now in session at Atlantic City, do hereby pledge their loyal support and earnest efforts in aid of securing national incorporation of the American Medical Association by a special act of Congress.

Report and Resignation of Treasurer.

Dr. C. S. Bacon, in the absence of the Treasurer, Dr. H. P. Newman, who was unable to present the report in person on account of illness, read the report for him, in which he tendered his resignation.

On motion of Dr. Harold N. Moyer, Illinois, the report was accepted, referred to the Board of Trustees, and a vote of thanks extended to Dr. Newman for his long and faithful service to the Association.

Report of the Board of Trustees.

Dr. T. J. Happel then read the report of the Board of Trustees:

To the Officers, Members and House of Delegates of the American Medical Association:

As required by the Constitution and By-Laws of our Association, we present herewith our annual report. This report we

trust will give you a clear insight into the condition of the Association financially, and as the publisher of what we believe to be one of the best medical journals in the world.

Before entering on the latter part of our subject we would present to you succinctly, as a financial résumé, first, Exhibit "A," the "Revenue Account for the Year Ending Dec. 31, 1903," as gotten up by the Audit Company which examined the books and accounts of THE JOURNAL and Treasurer's offices; second, Exhibit "B," "Balance Sheet Dec. 31, 1903;" third, Exhibit "C," "Disposition of Surplus for the Year Ending Dec. 31, 1903;" all by the same party; fourth, Exhibit "D," "Treasurer's Report for the Year 1903;" fifth, Exhibit "E," "A Comparative Statement, in Tabulated Form, Assets and Receipts of 1903."

The following is a copy of the Auditor's Report:

THE INVESTOR'S AUDIT COMPANY, 732 THE ROOKERY.

CHICAGO, Feb. 4, 1904.

DR. M. L. HARRIS, Resident Trustee of Board of Trustees American Medical Association, Chicago:

Dear Sir: In accordance with your instructions we have examined the books and vouchers of the American Medical Association for the year ending Dec. 31, 1903, and we beg to hand you attached hereto the following statements:

Balance sheet as at Dec. 31, 1903.
Revenue account for the year ending Dec. 31, 1903.
Disposition of surplus for the year ending Dec. 31, 1903.

We have examined properly approved and receipted vouchers or other evidences covering all cash disbursements during the year, and we have traced all cash received from the records of original entry to the credit of the proper accounts in the ledger. We examined the cash on hand during our visit and verified the cash in bank by certificates of statements furnished by the bankers. We have also examined City of Chicago four per cent. school bonds of the par value of $14,000.00, in possession of the Treasurer.

The books have been neatly and accurately kept, and the office work generally appeared to be highly efficient, considering the fact that there are periods of extreme pressure on the office staff.

The bookkeeping system was revised during the year on the lines suggested in our report, except that the members' accounts are still kept on cards instead of in a permanent bound register or ledger, as we recommended. Additional precautions taken in recording cash received, however, have done much to obviate the objections that existed last year to using cards for members' accounts.

We shall be glad to give you any further information that you may desire. Yours faithfully,

(Signed.) THE INVESTORS' AUDIT COMPANY.

EXHIBIT "A."

REVENUE ACCOUNT FOR THE YEAR ENDING DEC. 31, 1903.

Subscriptions collected during year		$ 52,567.26
Membership dues		63,227.48
Advertisements		38,153.05
Jobbing		3,040.11
Books		2,295.29
Rents of Association properties		2,168.00
Buttons		567.75
Miscellaneous sales		144.60
Interest on bonds		240.00
Inventory of paper, type and metal Dec. 31, 1903		5,562.00
		$124,494.52
PUBLICATION EXPENSES:		
Paper	$ 52,730.70	
Ink	2,066.54	
Type, metal and electros	2,488.94	
Salaries and pay rolls	57,067.34	
News, reporting, etc.	6,639.17	
Binding	208.21	
Machinery, repairs and renewals	1,238.19	
Advertising and subscription commissions	8,268.72	
Postage, first and second class	15,330.96	
Power, fuel and light	3,040.77	
General expense	2,251.21	
Exchange	279.90	
Collection fees	1,033.12	
Discount	1,694.55	
Factory supplies	626.61	
Office jobbing	1,888.00	
Transportation	1,385.28	
Express and cartage	916.34	
Bad debts less recoveries	1,642.76	
Depreciation of machinery and furniture and fixtures	3,798.33	$166,529.13
GENERAL EXPENSES:		
Organization expense	$ 3,323.19	
Association expense	6,620.80	
Auditing accounts	175.00	
Miscellaneous expense	783.40	
Building expense	525.71	
Buttons	900.85	
Insurance and taxes	1,257.01	
Depreciation of buildings	4,290.37	$ 19,793.33
Net revenue for the year ending Dec. 31, 1903		38,162.06
		$224,484.52

EXHIBIT "B."

BALANCE SHEET—DEC. 31, 1903.

ASSETS.

Real estate and buildings			$ 96,162.71
Machinery			30,798.79
Furniture and fixtures			9,481.10
Library (estimated)			1,000.00
Inventories of type, metal and paper stock			5,562.00
Bonds, (par value $14,000.00)			15,168.13
Bills receivable		$ 1,172.32	
Accounts receivable	$41,008.39		
Less reserve for unearned advertising	31,206.92	9,801.47	10,973.79
Cash on hand in bank			6,147.85
			$169,199.78

LIABILITIES.

Accounts payable			$ 194.62
Sectional reports paid in advance			455.00
Surplus:			
Balance as at Jan. 1, 1903		$127,980.67	
Add:			
Inventory of books, furniture and fixtures not previously taken into account		1,121.60	
Profit on machinery sold during the year		1,306.62	
Net revenue for the year, as per account annexed		38,102.06	168,550.15
			$169,199.78

EXHIBIT "C."

DISPOSITION OF SURPLUS FOR THE YEAR ENDING DEC. 31, 1903.

INCREASE IN ASSETS:			
Real estate and buildings		$ 14,952.77	
Machinery		13,539.30	
Furniture and fixtures		1,129.40	
Library		1,000.00	
Inventories of type, metal and paper stock		3,154.33	$ 33,775.81
Decrease in accounts payable			9,866.04
			$ 43,640.84
DECREASE IN ASSETS:			
Bills and accounts receivable	$ 2,775.97		
Cash	275.19		3,051.16
Surplus for the year			$ 40,589.68

EXHIBIT "D."

Annual report of the Treasurer of the American Medical Association for the fiscal year commencing Jan. 1, 1903, and ending Dec. 31, 1903.

H. P. Newman, M. D., in account with the American Medical Association, Dr.

RECEIPTS.

1903.		
Jan. 1—To cash, balance on hand		$ 5,887.88
Jan. 20—To rebate, building contractors, account street obstruction	$75.00	
Feb. 6—To contractors' share of insurance	16.65	91.65
Feb. 12—To cash, rents of houses, January and February		265.00
Feb. 25—To cash, membership fees, January and February		26,170.60
March 7—To cash, membership fees collected by bank		20.00
Dec. 7—To cash, interest on bonds		540.00
		$32,988.23

DISBURSEMENTS.

Jan. 2—By cash, attorney's fee, regarding national charter	100.00
Jan. 3—By cash, allowance by agents on rentals	15.00
Jan. 6—By cash, postage, Treasurer's office	200.00
Jan. 9—By cash, safe, furniture and moving furniture	68.75
Jan. 20—By cash, building account	4,291.40
Feb. 3—By cash, hardware for building	242.90
Feb. 6—By cash, electric and gas fixtures	318.75
Feb. 13—By cash, architects, on account	300.00
Feb. 13—By cash, membership fees returned	11.25
Feb. 15—By cash, commissions of real estate agents, January and February rents	10.30
Feb. 15—By cash, filing cases	6.00
Feb. 21—By cash, trustees' expenses, attending annual meeting at Chicago	634.68
Feb. 21—By cash, Dr. J. F. Fulton, transportation committee, expenses June, 1902	46.50
Feb. 28—By cash, sundries, Treasurer's office	5.01
Feb. 28—By cash, clerical services paid in January and February	279.00
March 16—By cash, Journal account for fees collected by bank	20.65
June 17—By cash, purchase price Indiana street property	14,800.00
Aug. 9—By cash, requisition, account Journal office	7,000.00
	$29,974.09
Dec. 31—Balance, cash on hand (including balance in National Bank of Illinois)	3,013.14
	$32,988.23

ASSETS JAN. 1, 1904.

Chicago city school bonds (purchase price)	$15,168.12
Balance in First National Bank	1,116.76
Balance in National Bank of Illinois (not available)	1,902.39
	$18,187.27

Respectfully submitted,
H. P. NEWMAN, Treasurer.

EXHIBIT "E."

JOURNAL COMPARISONS.

	1903.	1902.	Excess.
Real estate, old and new[1]	$ 96,890.00	$ 82,085.26	$ 16,214.74
Furniture and fixtures	3,967.92	2,451.70	1,516.20
Machinery account	25,116.21	17,174.40	17,940.81
Type, metal and inventory	5,562.00	2,407.47	3,154.53
Accounts received, including unearned ads	41,008.27	39,197.70	1,808.67
Cash	6,097.55	6,422.54	
Totals	$190,533.95	$150,219.27	$40,634.77
Less difference in cash			225.19
Apparent gain			$40,309.58

JOURNAL COMPARISONS.

	1903.	1902.	Excess.
Dues	$62,227.48	$54,820.00	$4,407.48
Advertisements	$88,533.65	$76,046.82	$12,486.82
Subscriptions	32,567.38	30,863.63	21,703.75
Rents of Association property	2,125.00	1,404.05	720.95
Miscellaneous sales	2,265.32	1,811.20	454.12
Jobbing	8,669.11	5,741.26	2,927.15
Buttons	567.75	149.71	418.04

Just at this point we desire to call attention to the fact that your Treasurer's report differs from those of former years from the fact that since March 1, 1903, he has been really the *Treasurer* of the Association, receiving from THE JOURNAL office only the surplus funds of the Association, not collecting the dues as formerly. All dues are now collected in THE JOURNAL office, through the bookkeeper. This change in methods of bookkeeping has resulted in simplifying accounts and has curtailed the expenditures of the Association materially, having completely done away with the necessity of transferring monies from THE JOURNAL office, to be within a few days drawn out again from the Treasurer and used in THE JOURNAL office. Now THE JOURNAL collects all accounts, whether dues, subscriptions or advertisements or whatever else they may be, uses the money in paying all expenses of THE JOURNAL and the Association, and hands over the surplus to the Treasurer. He becomes the custodian of the funds of the Association that are not in active use, and of the invested funds. Reference was made more fully to the matter in the report of 1903 and hence we deem it unnecessary to enter into it in *extenso* here.

ADVERTISING.

The amount actually earned during the year was $88,533.65, being an increase of $12,486.82, or about 16½ per cent. over the preceding year. Table No. 1 shows the actual amount earned during the past five years. We have also included 1898 as a comparison, although under the system of bookkeeping then in vogue it was impossible to do otherwise than give the cash receipts; consequently the amount for 1898 represents the cash receipts, while the columns for the other years show the amount earned.

TABLE 1.

1898.	1899.	1900.
$35,629.71	$44,971.10	$50,230.64
1901.	1902.	1903.
$62,338.36	$76,046.83	$88,533.65

During the past year THE JOURNAL has been more strict regarding accepting advertisements, and a large number of advertisements that are being carried by other medical weeklies have been declared not acceptable to its pages.

Most of them were declared unacceptable for the reason that they were considered secret proprietaries. A few, however, were rejected because they were advertised direct to the laity.

CIRCULATION DEPARTMENT.

The following figures represent the gross issue of THE JOURNAL each week during the year 1903:

	Weekly Edition.		Weekly Edition.	
Jan. 3	25,721	July 4	27,918	
Jan. 10	26,764	July 11	28,151	
Jan. 17	26,800	July 18	28,200	
Jan. 24	26,800	July 25	28,266	
Jan. 31	26,500			112,845
	132,085	Aug. 1	27,972	
Feb. 7	26,876	Aug. 8	28,085	
Feb. 14	26,640	Aug. 15	30,252	
Feb. 21	26,667	Aug. 22	28,555	
Feb. 28	26,798	Aug. 29	28,617	
	107,001			143,454
March 7	27,000	Sept. 5	28,825	
March 14	27,076	Sept. 12	29,288	
March 21	27,070	Sept. 19	29,963	
March 28	27,100	Sept. 26	30,050	
	108,246			118,126
April 4	27,000	Oct. 3	30,120	
April 11	34,350	Oct. 10	30,100	
April 18	27,440	Oct. 17	30,110	
April 25	27,260	Oct. 24	30,500	
	116,050	Oct. 31	30,474	151,304
May 2	27,317	Nov. 7	30,879	
May 9	27,427	Nov. 14	30,611	
May 16	27,414	Nov. 21	30,784	
May 23	28,141	Nov. 28	30,021	
May 30	28,150			122,295
	141,449			
June 6	28,100	Dec. 5	30,927	
June 13	28,100	Dec. 12	31,229	
June 20	28,100	Dec. 19	30,193	
June 27	27,800	Dec. 26	30,026	
	112,200			122,235
	717,031			770,949
Grand Total	1,487,980	Weekly Average		28,615

The total number of copies issued during 1902 was 1,316,695, indicating an increase of 171,285, or a weekly average increase of 3,294.

The following is a detailed count of the mailing list by states on Jan. 1, 1904, indicating gains and losses in members and subscribers in each state for 1903:

State.	Members.	Subscribers.	Totals.	Gain for Year.	Loss for Year.
Alabama	206	191	390	137	...
Arkansas	173	136	309	54	...
Arizona	34	37	61	10	...
Alaska	1	...	1	...	1
California	442	474	916	267	...
Colorado	322	215	537	132	...
Connecticut	194	121	315	29	...
Delaware	26	13	39	...	5
Dist. of Columbia	172	220	392	9	...
Florida	47	62	109	...	22
Georgia	178	182	360	...	61
Idaho	34	31	65	10	...
Illinois	1,842	1,661	3,043	142	...
Indiana	558	622	1,180	170	...
Indian Territory	33	113	146	21	...
Iowa	567	618	1,185	200	...
Kansas	197	378	545	132	...
Kentucky	324	514	838	105	...
Louisiana	242	220	462	122	...
Maine	83	60	143	28	...
Maryland	247	344	591	...	61
Massachusetts	471	473	944	197	...
Michigan	552	819	1,369	189	...
Minnesota	424	237	661	...	24
Missouri	438	767	1,205	265	...
Mississippi	150	152	302	114	...
Montana	82	35	117	11	...
Nebraska	196	221	417	131	...
New Hampshire	102	51	153	34	...
Nevada	10	21	31	10	...
New Jersey	345	302	647	18	...
New York	983	852	1,835	46	...
North Carolina	85	104	249	10	...
North Dakota	71	76	147	29	...
Ohio	961	826	1,787	160	...
Oklahoma	54	141	195	32	...
Oregon	108	111	219	47	...
Pennsylvania	1,365	851	2,216	229	...
Rhode Island	85	84	169	29	...
South Carolina	88	103	191	...	17
South Dakota	70	98	168	...	...
Tennessee	271	318	589	33	...
Texas	335	556	891	165	...
Utah	54	47	101	19	...
Vermont	82	46	129	33	...
Virginia	178	227	405	19	...
Washington	139	181	320	110	...
West Virginia	146	132	278	53	...
Wisconsin	434	463	897	61	...
Wyoming	21	21	42	...	1
New Mexico	33	36	69	21	...
Canada	8	102	110	12	...
Cuba	2	9	11	3	...
Hawaiian Islands	10	11	21	5	...
Mexico	9	30	39	12	...
Philippine Islands	11	4	15	...	2
Porto Rico	1	3	4	...	1
U. S. Marine Hosp.	31	31	62	...	...
U. S. Army	...	245	245	...	4
Foreign	22	80	102	47	...
	13,899	14,674	28,573	3,860	219

The figures given below indicate the count of the mailing list Jan. 1, 1904, compared with that of Jan. 1, 1903:

1. The realty account does not correspond exactly with amount set forth in the report of the auditors, but the discrepancy is apparent, not real, being due to carrying certain items to real estate account that are treated differently by the auditors.

	Jan. 1, 1903.	Jan. 1, 1904.
Copies to members	12,513	14,329
Copies to subscribers	13,578	14,074
Copies to advertisers	223	221
Copies to exchanges (domestic)	150	141
Copies to exchanges (foreign)	94	93
Copies to medical colleges and libraries	114	102
Copies to subscription agents	81	84
	26,672	29,287

Indicating an increase for the year 1903 over 1902 of 3,615, being a fraction more than 14 per cent.

The following table indicates what percentage of the total number of physicians in each state are taking THE JOURNAL. The table does not include members of the Medical Department of the U. S. Army or of the U. S. Public Health and Marine-Hospital Service. Neither does it include copies sent to advertisers, agents, exchanges and college or hospital reading rooms.

State.	Physicians in State.	Number Receiving Journal.	Approximate per cent.
Alabama	2,106	220	10
Arizona	181	61	34
Arkansas	2,226	269	12
California	3,803	691	18
Colorado	1,867	337	20
Connecticut	1,278	315	25
Delaware	228	39	17
District of Columbia	668	292	44
Florida	650	109	17
Georgia	2,780	340	13
Idaho	216	65	30
Illinois	8,546	3,043	36
Indiana	4,616	1,150	25
Indian Territory	718	146	21
Iowa	3,555	1,185	31
Kansas	2,583	545	21
Kentucky	3,272	628	19
Louisiana	1,432	269	19
Maine	1,235	143	12
Maryland	1,917	581	31
Massachusetts	4,949	944	19
Michigan	4,178	1,389	33
Minnesota	1,891	681	36
Mississippi	1,582	302	19
Missouri	6,062	1,206	20
Montana	331	117	36
Nebraska	1,501	417	28
Nevada	74	31	42
New Hampshire	701	153	22
New Jersey	2,173	567	26
New Mexico	171	69	40
New York	12,209	1,625	14
North Carolina	1,685	249	17
North Dakota	302	147	48
Ohio	6,188	1,787	29
Oklahoma	903	195	22
Oregon	647	219	34
Pennsylvania	9,831	2,216	23
Rhode Island	671	169	25
South Carolina	1,124	191	17
South Dakota	497	198	39
Tennessee	3,428	599	17
Texas	4,826	901	19
Utah	287	101	35
Vermont	707	128	18
Virginia	2,030	403	20
Washington	760	320	41
West Virginia	1,382	278	20
Wisconsin	2,801	807	28
Wyoming	126	42	34

Our subscription receipts (receipts from members being considered elsewhere) have steadily increased each year, as the following table will show:

Subscriptions.		Membership dues.	
1898	$ 9 746.55	1898	$3,780.00
1899	12,283.33	1899	38,065.00
1900	23,007.03	1900	46,700.00
1901	33,783.45	1901	51,585.00
1902	41,570.48	1902	59,160.00
1903	52,547.38	1903	63,237.00

In spite of the fact that our subscription account is practically a clearing house for membership, since we are continually urging subscribers to become members, nevertheless, as will be noticed our great increase is through subscribers.

Below is given a table showing the number of subscribers for each year, according to the mailing list, commencing with January, 1899, about the time that the present editor took charge of THE JOURNAL:

	Members.	Subscribers.
Jan. 1, 1899	7,997	2,453
Jan. 1, 1900	8,445	4,633
Jan. 1, 1901	9,841	8,339
Jan. 1, 1902	11,107	10,795
Jan. 1, 1903	12,853	12,378
Jan. 1, 1904	13,899	14,674

It will be noticed from the table that, while there has been a slow and steady increase in the number of members, there has been a more rapid increase in the number of subscribers. It will be noticed also that the number of subscribers now exceeds the number of members.

The report presented by the Editor to your Board of Trustees reveals plainly the fact that the increase in membership and subscription list has been the result of labors of soliciting agents working for THE JOURNAL. These agents visit the members of the profession and present the claims of THE JOURNAL to them personally, and in this way many members and subscribers have been gotten. The attempt to increase the membership list by correspondence with the secretaries of county medical societies proved almost a complete failure. Occasionally one would respond, but as a rule they manifested little or no interest in the matter, even when offered a commission on the result of their work. This is not as it should have been. Every county medical society should be canvassed for subscriptions to THE JOURNAL, and it should be the duty of the president and secretary to present its claims on the medical profession at least twice a year to their county medical societies. This should be the great source of increase of membership to the Association.

The work of organization, the result of which is the creation of new societies, makes more physicians *eligible* to membership, but it does not increase the number of those that actually become members until they are personally solicited, and the one who will do this is the one who is paid for it.

The tables already given will show that we have a pretty fair percentage of the physicians of the country. We, therefore, can not expect to make the proportionate progress that we have made in the past. THE JOURNAL only appeals to the fairly well educated physician, and, while an increasing proportion of the members of the profession are gradually becoming of a higher standard still the proportionate increase in our circulation can not be expected in the future.

Above we show that there has been an increase of 3,615 in our circulation during the year, but it must not be forgotten that this is the net increase. There have been dropped approximately 3,500 from our subscription list. Between 1,500 and 1,800 were dropped for non-payment of their subscriptions, and between 1,600 and 1,700 canceled their subscriptions for various reasons. Besides this, over 1,000 names were dropped from the membership list. Of these 189 from deaths, 222 no longer eligible, 201 non-payment of dues, 545 resigned (not a few on account of age) and 55 not found. In other words, while we only show a net increase, as above stated, we really added to our membership and subscription list about 8,000 new names.

PROFITS.

Each year in our report we have called attention to the fact that the profits made by THE JOURNAL should be kept separate and distinct from the net profits of the Association. Each year the expenses incurred by the Association vary, as is shown by the table given below.

In our annual statement we have shown what THE JOURNAL has really earned during the year. Heretofore, owing to the fact that two systems of bookkeeping were in vogue—that of the Treasurer's office and that of THE JOURNAL office—it was impossible to more than estimate the true profits. This year, by our more perfected system of bookkeeping, we are able to tell exactly what THE JOURNAL has gained. In the auditor's statement, "Revenue Account for the Year," under "General Expense," are the following items:

Organization expense	$5,323.19
Association expense	6,629.80
	$11,952.99

This amount is an expense incurred by the Association that has absolutely nothing to do with the expense of THE JOURNAL.

Accounting all revenues and expenditures, the Association made a net profit of $40,488.68. This profit includes a net income from rentals of $1,400.34 and interest on Chicago city school bonds of $560.00.

From our revenues during the year the Association proper cost $6,269.80 plus organization $5,323.19. Adding these two items to our net profits and deducting the gains above mentioned will leave a net profit for THE JOURNAL of $30,481.33, or as tabulated as follows:

ASSOCIATION NET PROFITS		$40,488.66
Association expenses	$6,629.80	
Organization expenses	5,323.19	11,952.99
		$52,441.67
Less interest on bonds	$ 560.00	
Net income on houses	1,400.34	1,960.34
Journal profit, 1903		$50,481.33

PAPER STOCK.

The following shows the cost of paper stock used in THE JOURNAL for the past four years:

1900.	1901.	1902.	1903.
$25,599.00	$29,835.00	$35,675.00	$43,906.57

The following table gives the total number of copies of THE JOURNAL issued each year for the past six years (the various items for 1898 being estimated), total number of pages and amount of paper stock used in reams, pounds and tons:

	Copies.	Pages.	Reams	Paper.	Tons.
1898....	397,282	4,756	3,385	327,525	157
1899....	710,950	5,382	4,532	461,420	230
1900....	907,200	6,067	6,747	607,230	303.5
1901....	1,146,575	6,510	9,052	814,680	407
1902....	1,316,005	6,522	10,220	938,700	469 1/3
1903....	1,487,980	6,348	12,365	1,113,100	556 11/20

This table shows an increase in the amount of paper used during the year 1903 over that of 1902 of 87 tons.

An examination of the mailing list given on page .. shows that on Jan. 1 there were sent out 29,287 copies of THE JOURNAL as compared with 25,672 copies on Jan. 1, 1903, a gain as already stated of more than 14 per cent. While this gain is gratifying, it is not what it should be. We need and must have a bona fide list of 100,000 readers of and subscribers to THE JOURNAL of our Association. No member of the Association should feel that he has done his duty toward it who has not been instrumental in securing a subscriber to our organ. There should be a rivalry between the state organizations in securing this increase. The Association might evolve some scheme to bring about this result.

During the past year we have paid for machinery, including two double flat-bed perfecting presses, $17,391.00.

PRESS ROOM.

In your press room you have:

Two double flat-bed perfection presses, 3 single presses, 2 10-H. P. motors, 1 2-H. P. motor, 1 ¼-H. P. motor, 2 automatic feeders, 3 3-H. P. motors, 2 ½-H. P. motors.

BINDERY.

In your bindery you have, among other improvements:

One folding machine, 2-H. P. motor; 1 folding machine, 1-H. P. motor; 1 Sheridan cutter, 2 stitchers and motor for each.

COMPOSING ROOM.

Here you will find:

Four linotype machines and motors, 2 job presses, imposing stones, type cabinets, board cabinets, etc., together with necessary desks, chairs and stools with everything else needed in a first-class 20th century composing room.

OFFICE.

In the office on the second floor: Seven desks, 4 tables, 3 letter files, 4 bookcases, 5 card index files, 7 typewriters and everything else needed, including safes to make a convenient office outfit.

LIBRARY ROOM.

Reference was made in our report for 1903 to this important adjunct to our building. Located on the third floor, easy of access either by elevator or stairway, removed from the noise of the machinery and the hum of business, it furnishes an ideal place for the winter meeting of your Board of Trustees and a most excellent reading room for the visiting members of the profession. In this room will be found an excellent nucleus for a library, the value of which, as shown by your auditor's report, is placed at $1,000.00, which would fall several hundred dollars below the market prices of the books on the shelves, consisting of the latest medical publications sent for review and otherwise to THE JOURNAL.

BUILDINGS.

In the report made to you in New Orleans, May, 1903, we stated that in addition to THE JOURNAL building itself, we had bought and paid for three residences fronting Dearborn avenue, all of which property, including the site of THE JOURNAL office, cost us $42,646.96.

The trouble with the coal strikes of last winter impressed on us the necessity for an abundance of room in which to store coal for running purposes in a sufficient quantity to tide our work over any such emergency. This fact induced us to purchase two more residences fronting on Indiana Street, and joining the other houses in their rear, reaching through to the alley parallel with Indiana Street. This property was bought for $14,900, and now rents for $100 per month.

The three houses facing Dearborn Avenue rent for $155 per month. If we figure the houses as covering three-fifths of the property (outside of that bought last summer), the following statement can be made: Three-fifths of the original cost ($42,646.96), $25,588.17; gross income for the year $1,675; total expenses, taxes, insurance, sundry commissions, etc., $658.92, leaving a net income on the three houses of $1,016.08, which is practically 4 per cent. on the investment.

As regards the property occupied by THE JOURNAL itself, the following statement should be made:

Cost of building	$41,322.90
Improving storkroom and coal shed	1,574.07
Two-fifth of the taxes	148.16
Insurance on building	179.37
Two-fifths cost of property	17,053.79
Total	$60,278.19

If we estimate that our income should be 4 per cent. on the amount invested in this property, then our rent would cost us $2,411.12, or a little over $200 per month. Before making this purchase we were paying $150 per month rent for one floor, where THE JOURNAL attempted to carry on its business at No. 61 Market street. Our quarters had become so cramped and crowded from the growth of the business of THE JOURNAL, that at the end of our then lease, to have secured sufficient floor space for carrying on our work safely, not economically, would have cost us $5,000 per annum. A glance at the figures already given will show that we are saving more than $2,500 in the question of rent for THE JOURNAL office alone.

Now if we take the three items as follows:

Cost of Journal office	$60,278.19
Cost of three dwellings	25,588.17
Cost of two new dwellings	14,900.00
Total amount invested	$100,766.36

Four per cent. (4 per cent.) on this investment is $4,030.64. Our net income from the three dwellings this year has been $1,016.08 and from the two new dwellings for about six months of the year $384.26, making a total of net rents received $1,400.34; rents on JOURNAL office saved, $5,000; aggregate saved and received, $6,400.34, which is practically 6⅓ per cent. on the property investment, after deducting insurance, taxes, commissions and sundry small items of expenses.

IMPROVEMENTS.

As already intimated in a preceding part of this report, improvements have been made on the property owned by the Association so as to enable us to store a sufficient amount of coal to meet any ordinary emergency and to permit our purchasing a sufficient amount of paper at any time to meet all ordinary demands.

The Board appropriated such a part of $565 as might be needed to paint and further repair the five dwelling houses. We felt that business methods demanded this outlay. With these improvements made the property owned by you will be in good condition. You are now receiving more than $250 per month rentals from your dwelling houses, with a fair prospect for this amount to increase yearly.

OTHER INVESTMENTS.

We reported to you last year that you owned $14,000 in Chicago City School Bonds worth in cash more than $15,000. Since then we have invested $25,000 more in convertible securities drawing an average of 4 per cent. interest per annum, making a total of about $40,000 already provided of the desired $150,000 of reserve fund which this Association should set aside before any change should be made in its fiscal policy.

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This fund should not be laid up at the expense of THE JOURNAL—that is, by curtailing it in any way—but by avoiding extravagant, and for the present injudicious, expenditure of money.

THE JOURNAL should be constantly improved. The ideals of the present editor should be attained finally. It should be made a journal in which every practitioner in America, whether he be a specialist working in his laboratory, a college professor in his lecture-room, or the humblest backwoods physician in in a country district, can find interesting and profitable reading. It should be made a desired and welcome visitor in every physician's office or home in our land.

The fact that more than $6,000 worth of advertising matter was refused during the year of 1903 goes far toward establishing the fact that THE JOURNAL is not published for revenue.

APPROPRIATIONS.

A bill of $314.75 was paid Dr. C. A. L. Reed, Chairman of Committee on National Legislation.

The Rush Monument Fund appropriation of $500 has not up to this time been called for, though Dr. Holton has been notified that it is ready for him when needed by the committee.*

ACCOUNTS, ETC.

We would report that accounts to the amount of $132 were paid the Secretaries of Sections last year, that for the current year "a sum not to exceed $50 was appropriated to cover services, postage and expenses of the Secretary of each Section of the Association." In order that these accounts be promptly met they must be presented to some member of the Board by the third day of the session at Atlantic City. If handed in after that time they can not be properly audited and will be carried over to the February meeting of the Board in Chicago.

We desire again to call attention to the fact that where no specific appropriation has been made for any purpose no money can be paid out. Wherever the House of Delegates desires money to be expended we would suggest that a definit limit be fixed to the appropriation, as has been done with the Committee on Organization and the Scientific Exhibit.

In regard to the control of exhibits of drugs, etc., at our annual session, your Board has not yet been able to formulate any definite course of management better than that of the local committee for this year. We recognize the fact that present arrangements are not entirely satisfactory, but for the Association to assume control of the matter through one of its own officers would be too great a financial venture for the present, and then, too, it would be depriving the local committee of its chief source of revenue out of which to meet the expenses which it incurs, and the obligations assumed by it, and would no doubt decrease greatly the number of local entertainments given to the visiting members. We hope at some future time to be able to suggest some feasible solution of this important question.

We are earnestly insisting that no exhibit should be permitted at any of our meetings, an advertisement of which would not be admitted to the pages of our journal. If the local committee will adhere to this closely, no great harm can be done by leaving this matter in their hands for the present. When the Association shall have secured a large reserve fund to meet emergencies, then it can test the matter fully by undertaking the control of the exhibit hall through a special officer appointed for that purpose. If the Association should do this, it must assume all financial obligations of all kinds connected with each annual session and furnish the funds needed by the local committee to supply many of the social amenities connected with such occasions.

NATIONAL INCORPORATION.

This question has been before your Board both individually and collectively during the past year. Inasmuch as a special committee was appointed by the President of the Association to consider and report on this matter further, we feel that it does not belong to us as a Board to attempt to enter on any discussion of the subject.

* This has been paid since the above was written.

ORGANIZATION.

In February, 1903, feeling the urgent need of actively pressing to an early completion the work of reorganization of the state societies along the uniform line adopted by the American Medical Association, Dr. J. N. McCormack was placed in the field as a National Organizer, as reported at the May meeting at New Orleans in that year. It was decided at that meeting, at a conference of the Board with Dr. McCormack, to retain his services in the field for another year. The result of the year's work is known to most of you who have read THE JOURNAL and kept in touch with his work.

Nearly every state has accepted the plan of reorganization proposed, and all are in good faith complying with every requirement of our constitution and by-laws adopted at St. Paul in 1901 and readopted at Saratoga in 1902. So completely has this work been done that we feel safe in dispensing with any further work on the part of our Organizer, and leaving the work in the hands of the several state associations to complete, by organizing a county society in every county in each state and territory in the Union.

The work done by Dr. McCormack has been of inestimable value to the American Medical Association, and was reluctantly undertaken by him. The thanks of the entire Association are due and should be tendered him for the successful completion of his stupendous task. It was a work that demanded a knowledge of men and measures; a knowledge of when to press a matter and when not; of how to present a plan in such a way that it could be grasped and understood by the physician from the city, the mountain and the valley—the city professor and the private practitioner from the country district. We feel that we were especially fortunate in having been able to place Dr. McCormack in this field of labor, that he has carried to a favorable termination a work that could have been managed as well by very few other members of the medical profession.

IN CONCLUSION.

We have presented to you this report of our stewardship; we trust that it has been done in such a way as to be readily comprehended by every member of the Association.

The thanks of the Board are due to our worthy Editor, Dr. George H. Simmons, for the untiring zeal displayed by him in looking after the affairs of THE JOURNAL. It has been largely through him that we are able to present you the favorable exhibit herewith submitted.

Respectfully,

E. E. MONTGOMERY, Secretary,
M. L. HARRIS,
W. W. GRANT,
H. L. E. JOHNSON,
WM. H. WELCH,
A. L. WRIGHT,
MILES F. PORTER, Vice Chmn
T. J. HAPPEL, Chairman.
JOHN F. FULTON.

On motion of Dr. Holton, the report was accepted and referred to the Reference Committee on Reports of Officers.

Reports of President and Secretary Approved.

In the absence of Dr. W. N. Wishard, chairman of the Reference Committee on Reports of Officers, Dr. Edwin Walker was requested by the chairman to say that the committee had examined the reports of the President and the Secretary, and recommended their approval.

On motion, the report of the committee was concurred in.

Report on Branch Associations.

Dr. J. N. McCormack read the report of the Committee on Organization relative to branch associations (printed on page (1580), which was referred to the Committee on Miscellaneous Business (page 1640).

Report on Time of Meeting of State Associations.

Dr. McCormack also presented a report of the committee with regard to recommendations as to time of meeting of State Associations (printed on page 1579), which was likewise referred to the Committee on Miscellaneous Business (page 1640).

On motion, the House adjourned until 9 a. m. Wednesday, June 8.

Fourth Meeting—Wednesday, June 8.

The House convened at 9 a. m. and was called to order by President Musser.

The minutes of the previous meeting were read and approved.

Report of Committee on Rush Monument Fund.

The President called for the report of the Committee on Rush Monument Fund, Dr. James C. Wilson, chairman.

Dr. Henry D. Holton stated that he had made his report as treasurer of the fund, which showed a certain amount of cash on hand. There were bills incurred with reference to the forthcoming dedicatory exercises, so that whatever money was left after these exercises would be returned to the secretary of the committee, and that the report of the committee would be made next year. The committee simply desired to report progress at this time (page 1643).

Report of Medicine and Food Bureau Again Referred.

Dr. J. N. McCormack said that the Reference Committee on Medical Legislation had considered the report of the Committee on National Bureau of Medicines and Foods, which was referred to it (page 1579), and the committee requests that the report be referred to the Enlarged Committee on National Legislation; and on motion of Dr. W. T. Bishop it was so referred (page 1644). The report is as follows:

REPORT OF THE COMMITTEE ON NATIONAL BUREAU OF MEDICINES AND FOODS.

To the President and Delegates:—Your committee herewith reports, as instructed, on the desirability and practicability of establishing a Bureau of Medicines and Foods. The objects contemplated by the bureau are as follows:

1—To relieve physicians, pharmacists and the public of all doubt as to the composition or standards of identity, purity, quality and strength, of such drugs, medicines and foodstuffs as may be submitted to and be found acceptable by a competent board of ten experts, to be chosen as set forth in the public plan accompanying this report.

2—To furnish the physicians and pharmacists, and others who may be interested, with accurate and reliable information concerning articles submitted to the bureau for its supervision.

3—To certify to the standards of identity, purity, quality and strength of such articles as may be determined to be worthy by the board of experts, and of no others.

4—To relieve the physicians, in the manner outlined, of the doubt and uncertainty as to the nature, composition or reliability of the medicines which they are requested by representatives of various houses to prescribe or employ.

Desirability.—There has been no dissenting opinion as to the great desirability of securing the foregoing objects, and of thus improving the quality of medicines and foodstuffs.

U. S. Government Work.—Your committee was instructed to work with a similar committee of the American Pharmaceutical Association, and also to refer the matters proposed to the proper U. S. Government authorities. In accordance with such instructions the whole question was laid before the Chief of the Bureau of Chemistry of the Department of Agriculture, Dr. Wiley, and a copy of his opinion, in every particular favorable, is herewith filed.

American Pharmaceutical Association Committee.—The work of investigation and consideration has been done by means of correspondence and circular letters, in which every member of the American Pharmaceutical Association committee, and all but one member of our own committee, has participated. A ballot has recently been taken. On the following fundamental points the American Pharmaceutical Association committee's vote was unanimous; ballots have been returned by three out of five members of our committee, and a fourth member has verbally communicated his views. The fundamental questions on which eight of the ten votes are recorded in the affirmative are as follows:

1—There is no apparent hope that the United States Government will provide for the work contemplated.

2—The two national associations are the bodies best constituted to select the board of experts to control such an organization.

3—The work should be done by certifying to the standard of identity, purity, quality and strength of acceptable articles, such certificates to be attached to original packages of articles known to comply with standards agreed on by the bureau and the Department of Agriculture or other U. S. Government departments having such work in charge.

4—Condemnation of bad products should not be obligatory, but may, if agreed to by the board of directors, be undertaken.

The plan recommended involves the formation of a bureau as a membership corporation (not for profit) and all members of these associations and other kindred scientific societies may be members of the same. (Copy herewith filed.)

It asks of the associations only one thing, namely, that the associations shall nominate the proper persons to act as directors of the bureau organization.

Responsibility.—Neither association could or would be involved in the slightest financial or legal responsibility, for the bureau would be a separate and corporate entity, shouldering its own responsibilities. On this question of responsibility, several legal firms have been consulted. They all agree that no responsibility can attach to either association for the acts of such a separate corporation as the bureau would be. Copy of one such opinion is filed herewith.

Practicability.—Whether or not the plan can be made successful can only be determined by actual trial. During the past year several firms have changed from opposition to the proposed organization to expressed approval and hope that it may be undertaken.

Your committee recommends that it be enlarged to include one representative from each body having representation in this house, to be appointed by the President; that this enlarged committee consider all the matters presented in this report and accompanying papers, and report thereon and on the advisability of adopting the following resolutions before the close of the present session:

1. *Resolved*, That a committee of five members of this Association shall be appointed who, acting with a similar committee of the American Pharmaceutical Association, may proceed to organize and incorporate the National Bureau of Medicines and Foods on and within the limitations set forth in this report and accompanying papers, and agreed to by the committee.

2. *Resolved*, That this committee may act as temporary directors of such membership corporation.

3. *Resolved*, That at the meeting of this Association following such organization, persons to act as permanent directors in accordance with the membership corporations act of the State of New York shall be elected.

Amended Report of Committee on Organization Held Over One Year.

Dr. Edwin Walker, Indiana, read the report of the Committee on Miscellaneous Business on the report of the Committee on Organization (pages 1579 and 1639).

THE REPORT OF THE COMMITTEE ON MISCELLANEOUS BUSINESS ON THE REPORT OF THE COMMITTEE ON ORGANIZATION.

The report of the Committee on Organization has been carefully considered and with the following amendments is approved:

Relative to the names of the branch associations and the states to comprise them we recommend as follows:

1—The North Atlantic Branch ("the New England and," being omitted), the states remaining the same.

2—South Atlantic Branch ("Middle and," being omitted), states remaining the same.

3—Gulf Branch ("Southern and," being omitted), Florida is added and Tennessee dropped.

4—Mississippi Valley Branch ("and Lake," being omitted), Tennessee added to the list of states.

5—Northwestern Branch (Iowa added to the states).

6—Southwestern Branch (Utah added to the states).

7—Pacific Branch (omit "Mountain and").

The complete constitution and by-laws for the district branches was not submitted to this committee and they cannot act on the same.

The recommendation in the report, viz.: "The presidents of the respective state associations become vice-presidents of the branch associations, and the presidents of these larger bodies in turn become the vice-presidents of this Association," is not concurred in, as it involves an amendment to the Constitution and By-laws.

With these amendments this committee recommends the adoption of the report.

The "recommendations as to the time of meeting of state associations," as reported by the Committee on Organization, is approved and its adoption recommended.

Dr. George M. Kober moved the adoption of the report and the recommendation contained therein. Seconded.

Dr. Harold N. Moyer, Illinois, moved as an amendment that the Committee on Organization be continued, and that the report be referred to it to report a year from now. The amendment was seconded and accepted.

The original motion as amended was carried, and the committee instructed to secure an expression from each state medical society in the meantime (modified, page 1645).

Report of Committee on Hygiene Adopted.

Dr. J. N. Hurty, Indiana, chairman, read the report of the Reference Committee on Hygiene and Public Health.

The committee respectfully recommended the adoption of the report referred to it (page 1582) relative to vital statistics, and also that the bill of Dr. Wilbur for printing be allowed.

On motion the report was adopted, and that part pertaining to expenditure of money referred to the Board of Trustees.

Report of Reference Committee on Sections.

Permanent Committee on Sections Proposed.—Dr. A. P. Ohlmacher submitted the following resolution in connection with his report as chairman of the Committee on Sections and Section Work:

Resolved, That the House of Delegates adopt a standing resolution that the President appoint a Permanent Committee on Sections and Section Work, consisting of three members.

It was moved that the resolution be adopted as presented by the committee. Seconded.

Dr. H. S. McConnel, Pennsylvania, raised the point as to whether the President could legally appoint a permanent committee.

After some discussion Dr. A. R. Craig, Pennsylvania, moved that the resolution be referred to the Committee on Constitution and By-laws, which was seconded, and the resolution was so referred, the committee being instructed to report to the House to-morrow morning (page 1644).

Report of Committee on Prophylaxis of Venereal Diseases.

Dr. Henry D. Holton then read the report of the Committee on Prophylaxis of Venereal Diseases, which, on motion of Dr. Craig, was referred to the Committee on Hygiene and Sanitary Science, and that committee was instructed to confer with the Board of Trustees and report to-morrow morning to the House of Delegates (page 1645).

REPORT OF THE COMMITTEE ON PROPHYLAXIS OF VENEREAL DISEASES.

To the House of Delegates:

The Committee on Prophylaxis of Venereal Diseases herewith submits its second annual report for your kind consideration. Believing that venereal diseases are paramount in their consequence and ravages to those wrought by tuberculosis and alcoholism, without, however, receiving the same consideration and popular attention, this committee considers it as one of its main duties to draw the attention of the medical profession, and incidentally that of the public, to the deleterious influence venereal diseases exert on the social, moral and racial conditions of the people. The triad of scourges—tuberculosis, alcoholism and venereal diseases—feeds on the body of our people and permeates all its classes beyond conception. Our legislators have tried to minimize the ravages of tuberculosis by making it reportable to the Boards of Health, which in turn effectually combat its propagation. Prohibition and high-tax license endeavor to curb the alcoholic demon.

Only venereal diseases have not as yet merited the attention either of our legislators or the public in general. This committee has tried to penetrate into untrodden paths and endeavored to hew its way through the primeval forest of prudishness, hypocrisy, secretiveness, false shame and prejudice, into a clearance of very promising features. We have found to our great satisfaction that not only is the medical profession as a unit convinced of the necessity that hygienic measures are imperative to combat venereal diseases, but also government, state, county and municipal boards and officers, university regents, lawyers, artisans, philanthropists and the educated public, each and all, are imbued with endeavor and goodwill to check the alarming spread of venereal diseases. However, it is the general public, the masses, which are dolefully ignorant, indolent, and unwittingly but criminally careless, that must be reached, educated and enlightened, as to the importance, dangers of acquiring, and of the dire consequences of disseminating venereal diseases.

Unfortunately, we are lacking in the most primitive elements of socio-moral legislation, and sanitary and hygienic regulations pertaining to venereal diseases. By a perverse mental process of reasoning, venereal diseases have been put on the proscription list. By sacrificing the effect—venereal diseases—to the regrettable cause—prostitution—those diseases are either tacitly left unnoticed, or if timidly noticed at all, their importance is underestimated. It seems that in endeavoring to appear above suspicion, of even countenancing the unholy outgrowth of socio-moral degradation, that most philanthropists, legislators and officials lend their Simon-pure activity to other exigencies, which leaves their endangered virtue and moral integrity above question. We, of the medical profession, can not but regret this deplorable demonstration of hyper-puritanism. We, who come in contact with the dire results of venereal disease in the guilty as well as in the innocent, and see the ravages of it in the trusting wife and innocent offspring, tainted, maimed and diseased, with vitiated blood coursing through their veins, a menace to their surroundings and to their race—we can not understand why a Mecenas has not yet arisen to save innocents by founding large hospitals and inhibit the deterioration of the race, which is sure to follow. Where is the hero for such a fund!

It is therefore incumbent on the medical profession to disseminate knowledge on venereal diseases and their prevention. It is the belief of this committee that only a concerted action emanating from our ranks and creating a popular movement by arousing the masses will be effectual. The unselfishness of such a movement, originated by the profession against its own material interests, will at once assure the populace of the high ethical standard of the crusade of education.

The symposium arranged by this committee is only the first step toward succeeding ones, which will take palpable form when this honorable House of Delegates will lend, as it is hoped, its authoritative and material aid for carrying on further investigation.

In our last year's report for the committee, we cited statistical data, illustrating the ravages of venereal diseases on the earning and producing capacity and the well-being of the people. A few new facts gathered since will forcibly bear this out. Both sexes contribute, although not equally so, to the sterility through ascending gonorrheal infection. In men, stricture may mechanically hinder the *potentia generandi*, fibrous cavernitis and suppurative folliculitis, the *potentia cocundi*, gonorrheal involvement of the prostate, which happens in ninety per cent. of gonorrheas, impairs the leavening property of its secretion on the semen, while the gonorrheal infection of the seminal glands makes this receptacle an ill-fit storage place for semen, produced even by healthy testicles.

Sclerosing epididymitis and obliterative funiculitis as a result of gonorrhea, however, are the main causes of sterility in men. Finger has found in 3,136 cases of epididymites gonorrhoica, 311 times to be double-sided; and in 242 cases of double-sided epididymites, azoospermia to occur in 207 cases. Lier and Asher found it in seventy-five cases without exception. Kehrer found that in ninety-six sterile marriages, 30 per cent. were due to azoospermia after gonorrhea, and Lier and Asher's investigations gave ninety cases of azoospermia in 132 sterile marriages, i. e., 66 per cent., which is about the average percentage of men's share in sterile marriages and of the most frequent sequela of gonorrhea. As about 80 per cent. of all men had contracted gonorrhea and probably 50 per cent. assume a latent form, E. Schwartz has calculated that in large cities, out of 100 married men, 10 enter wedlock afflicted with chronic, yet infectious gonorrhea; and that ten more acquire acute gonorrhea during married life. The source of these gonorrheal infections is traceable in about seventy per cent. to prostitutes.

While gonorrheal infection in men rarely assumes life-endangering properties, in women it will constitute a serious, often dangerous ailment by affecting the uterus and the adnexa, causing painful invalidism and sterility.

Gonorrhea in women will, according to Schenk, cause sterility in approximately 42 per cent. of marriages. In 100 marriages, Jaquet found sterility caused in 61 per cent. by gonorrhea; in 25 per cent. the husband was the direct cause of sterility and in 14 cases stenosis of the os uteri was present. Lier and Asher calculated in cases where both parties were examined that the husband contributed 50.1 and the wife 40.9 per cent. to the sterile condition. This tallies with another investigation, where out of 287 primarily sterile marriages in which the women alone were examined, gonorrhea was found 107 times, i. e., in 34.8 per cent. The approximate main average of the share in which both parties contribute to the existing sterility will be like 33 1/3 to 66 2/3 per cent. This means that out of a hundred sterile marriages, azoospermia of the men will be the cause in one-third and endometritis, pyosalpinx, etc., in two-thirds of the cases. The gonorrheal origin of female generative troubles in general can approximately be estimated, according to Chrobak, at 25 per cent.

It will be necessary in future investigations on sterility always to examine both parties. Tact and discretion in this delicate matter must be presupposed by the physician. This will elucidate much more impressively than was the case hitherto, the deleterious consequences of gonorrheal infection to women and the socio-economic importance for the individual, society and state.

What is the present status of venereal diseases in this country? What is the attitude of different states toward it? The first question can not be decided, inasmuch as each state has its sovereign and independent government and is at liberty to settle this question as it may deem proper. This being the case, each state had to be looked up separately. In order to accomplish this there was assigned to each member of the committee a section of the United States, so that every state and territory was covered. Up to the time of completion of last year's report, twenty states had responded, which were duly mentioned there. When this report goes to press, thirteen more states will have been heard from.

The following were the questions asked:

1—What laws exist in the different states relating to prostitution?

2—Is there a sanitary marriage law which provides for medical examination of the contracting parties?

3—Is there any law against wilfully or knowingly communicating venereal diseases?

4—What, if any, municipal regulations exist in any city of your state regarding these diseases?

5—Is notification required of these diseases in your state?

The following is a summary of the returns from the states which have responded, viz.: Arizona, Connecticut, California, District of Columbia, Idaho, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, North Carolina, Nebraska, Nevada, New York, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Virginia, West Virginia, Washington, Wisconsin, Wyoming and Vermont.

These 33 states, with the exception of Rhode Island and Connecticut, state in answer to question 1, that they have the usual common laws and sundry police regulations of general character against houses of ill fame, including specified nuisances therein against soliciting in streets, and against enticing of females under 16 years. To questions 2, 3, 4 and 5 the answer in all instances, as far as relating to venereal diseases, is negative, with the exception of Michigan, which is the only state in the Union that has done pioneer work relating to the spread of venereal diseases. It is of sufficient interest to quote it in part:

"No insane person, idiot, or person who has been afflicted with syphilis or gonorrhea and has not been cured of the same, shall be capable of contracting marriage. . . . Any person who has been afflicted with syphilis or gonorrhea and has not been cured of the same, who shall marry . . . shall be punished by a fine of not less than five hundred dollars or more than one thousand dollars . . . *Provided*, That in all prosecutions under this act a husband shall be examined as a witness against his wife and a wife shall be examined as a witness against her husband, whether such husband or wife consent or not: And further provided, that in all cases arising under this act any physician who has attended or prescribed for any husband or wife for either of the instances above mentioned shall be compelled to testify to any facts found by him from such attendance. Act No. 247, Laws of 1899. Approved June 15, 1899."

In the legislature of North Dakota a bill was proposed in 1899, but as far as known not acted on; yet, which provides that every candidate for marriage, in order to obtain a marriage license, is held to produce a certificate as to his physical and mental fitness to marry.

It is evident from the foregoing that, (*a*) prostitution is absolutely ignored; (*b*) that there are no laws on the statute books against spreading venereal diseases; (*c*) that venereal diseases are not among the reportable ones; (*d*) that with the exception of Michigan and North Dakota, the other states are not taking any cognizance of the question at all. Being aware that the decentralization in this country is one of the mainstays of our Constitution, and that home rule is carried and coveted to the limit, it soon became evident that some municipalities deal with

this question quite independently from their state, possessing local laws and ordinances relating to the social evil.

It was instructive and interesting to ascertain these divergencies and the ways the different municipalities deal with the social evil. To this end, a circular comprising questions akin to the above, was sent with the additional ones about the number of beds and hospital accommodations, which were recorded in the previous reports received since, to forty of the largest cities in the Union. The returns have conclusively shown that—with the exception of Detroit and Cincinnati, which have a regimentation somewhat after continental plans—there are no provisions at all in existence beside the police regulations of general character. These are confessedly not enforced unless some exceptional occurrence of badgering stirs the latent energies of the authorities into a crusade of high moral tension of very ephemeral character.

Not strictly relevant, but of interest in this connection, is an ordinance of the city of Denver, which provides that in the discretion of the health commissioner he may order an examination of a suspected prostitute, and if found diseased, she may be detained in a hospital until the contagious period of her ailment is passed. Los Angeles, Cal., has a large hospital, "which well affords"—the return says,—"ample accommodations for venereal diseases."

In contrast with this munificent provision are the meager accommodations of Buffalo, N. Y., where the old Erie County Hospital for venereal diseases treats about one dozen cases a year! New York, the Empire City, of which we all have reason to be proud for its great charitable and humanitarian institutions, has for the reception and treatment of venereal diseases 100 beds and for venereal men 56 beds in the city hospitals at Blackwell's Island.

To sum up, the returns apprise us of the dire fact that not one city has an approximately hospital facilities in proportion to the population. Each city falls far below the average of minimum requirements; a perfect dearth of hospitals.

Beside these attempts of official recognition of venereal diseases, there are also encouraging evidences from the ranks of the medical profession that the endeavors of this committee have struck sympathetic cords. That the profession is conscious of the great social danger which threatens society from the unchecked spreading of venereal diseases is evidenced by the activity of the different medical societies in dealing with this long-neglected question. In the last report of this committee, we had the pleasure to mention that the State Medical Association of Maine had the committee appointed to study the expediency of adding syphilis and venereal diseases to those required to be reported to the Board of Health. It had instructed its delegates to vote in favor of a Congress for Venereal Diseases. The Missouri Valley Medical Association endorsed this progressive movement of the A. M. A. by appointing a committee of three to co-operate with this committee. The State and Provincial Boards of Health of North America have adopted the idea to make venereal diseases reportable. The secretary of the State Board of Iowa; the Board of Health of the City of New York; the chancellors of the University of Nebraska, and the Washington University of St. Louis have expressed their sympathy and co-operation. Numerous state and city officials have worked in the same friendly spirit, expecting action to be taken by the American Medical Association through this committee.

The committee has the pleasure to report two recent additions to our fast-growing numbers of sympathisers. The New Haven County Public Health Association has drafted a resolution requesting the Connecticut State Medical Association to bring about legislation in respect of checking the spread of venereal diseases; recommending co-operation with our committee. The Washington State Medical Society, on Sept. 4, 1903, recognising the seriousness of venereal diseases and the need of concentrated action, has endorsed such action. The committee for the Study of Venereal Diseases of the American Medical Association may take in the work and had appointed a committee of three to co-operate with this committee.

It is my pleasant duty to express the thanks of our committee to Dr. G. A. Perrelle, of Seattle, Wash., to whose untiring efforts and strenuous devotion to the cause are due the acquisition of welcome alliance from the far west. He and his associates, by disseminating pamphlets broadcast, have succeeded in arousing the interest of the profession in the western states. We confidently expect that at next year the State Medical Societies of Oregon, California and Idaho will join the movement inaugurated by the American Medical Association.

Beside this formidable array of co-operators, your committee has received numerous expressions of sympathy for the cause from philanthropists and good citizens from the ranks of the profession, to all of whom cordial thanks are expressed.

It will be of interest to note the ways and means continental countries deal with prostitution and venereal diseases. With the exception of England, where the state absolutely ignores—except the army and navy—the existence of venereal diseases, every country there has dealt in some shape or form with the vexatious condition.

To Belgium belongs the honor of having taken the initial step toward an international understanding, which resulted in the formation, in 1899, of the "First International Conference for the Prophylaxis of Venereal Disease," in Brussels; followed by a second one in 1902. The creation of an international society—"Le Société Internationale de Prophylaxie Sanitaire et Morale"—was the outcome of these conferences.

Soon France, which has a century of unsuccessful experience with reglementation, established its own society, under the name, "Société Française de Prophylaxie Sanitaire et Morale," of which Fournier is the leading spirit. France has appointed an extra parliamentary commission to report on the advisability of retaining reglementation.

Through the agitation of Neisser, Lesser, Blaschko and others, Germany soon followed suit by founding the "Deutsche Gesellschaft für Bekämpfung der Geschlechtskrankheiten" (German Society for Combating Venereal Diseases), which had its first meeting Oct. 15, 1902, starting with an enrolled list of 600 members and numbering at present already over 3,500. Members of the royal family, men of letters and art, professionals, government officials and judges, men and women of every walk of society, have joined to combat the spread of venereal diseases, and within the two years of its existence this society has established branch societies through the German empire, publishes its transactions for distribution, and has established a bi-monthly journal (Zeitschrift für Bekämpfung der Geschlechtskrankheiten). It has held under its auspices at Frankfort-on-Main, in March, 1903, the first congress for combating venereal diseases, and in Berlin, 1904, a second one. Besides these formidable activities, it has edited and distributed half a million leaflets (Merkblatt), containing popular instruction for the prevention of venereal diseases. It has influenced legislation throughout the empire pertaining towards prevention of venereal diseases. It was instrumental in compelling sick-benefit societies to pay diseased venereal members their weekly benefit, from which they were formerly enjoined. It has caused legislation for reporting venereal diseases, especially in prostitutes, and it has petitioned that the provident educational law, which puts unchaste minors, or those endangered by their surroundings, up to their 16th year, under responsible guardianship. Such commitment should be extended to the 18th year. The good influence of this benedicent law is manifested by the fact that during the first year of its existence 2,838—36.4 per cent.—of those committed to compulsory guardianship were females; 710—25 per cent.—of these were from 16 to 18 years. Verily, this is an enviable record worthy to be emulated by other nations.

Italy, after having instituted and again repealed its laws for regulating prostitution, requires at present only syphilis to be reported.

Denmark has issued laws against the spread of venereal diseases as far back as 1874, and by the revised statute of March 1, 1895, has compelled physicians to return, without remuneration, reports of all forms of venereal diseases. A Danish society for combating venereal diseases has been established in December, 1902.

In Norway, where brothels have been abolished since 1888, physicians are compelled to send in monthly reports, also without mentioning names, of all cases of venereal diseases treated by them. A similar society is contemplated there and also in Sweden.

Direct punitive laws against wittingly communicating venereal diseases are in existence in those northern countries of Europe, also in Hungary, where the treatment of diseased prostitutes or outpatients in hospital or hospital treatment is compulsory. Gratuitous treatment to those afflicted with venereal diseases is granted to everyone regardless of means in Sweden, Norway, Denmark, Hungary, Italy and Bosnia (Austria). To Hungary belongs the honor of having the provision on its statute books that the cost incurring for such in a hospital should not be recovered, as is the case everywhere, from the place where the patient hails, but from the community where the cure has taken place. A wise law!

The Russian Syphilo-Dermatological Society, in a meeting held at St. Petersburg, Sept. 27, 1903, contemplated the founding, under its auspices, of a Russian society for combating venereal diseases. In a country where entire villages are infested with syphilis, acquired mostly in an extragenital way, and where nine-tenths of cases so infected are through carelessness and inferior culture, such a society will prove a godsend.

The Scientific Club in Vienna, at a meeting, March 30, 1904, commenced the organization of such a society for Austria. In Holland, Hungary and Italy movements for the establishment of such a society are on foot.

We see from the foregoing that the advent of a crusade against venereal diseases is on and is close at hand in the United States. Tuberculosis has set the pace. We will have to follow the lead. While in 1875, in Germany, out of every 10,000 people 31 died of consumption, from 1893 on this number commenced to diminish and in 1900 only 21 succumbed. Why? Because in 1875 public instruction was begun, and within a few years results have materialised. There is no reason to doubt that the identical results could be obtained with venereal diseases. It is true the topic is an extremely delicate one; but it is not beyond the skill of a surgeon if properly handled. This committee has come to the conclusion that one of the first requisites for disseminating knowledge on venereal diseases is to make it "discussable." The public at large must be convinced that *"naturalia non sunt turpia"*, that things pertaining to sexual life may, and should, be ventilated to make its dangers apparent without fear.

This committee has confined its studies to the enormous spread of venereal diseases, without deciding on the merits or the demerits of a "regulation" of the social evil. It has come to a conclusion that systematised action emanating from the medical profession, on a discreet knowledge to teach the people the hygiene of sexual life—is the first step to diminish the dire consequence of venereal disease.

As the states can not with impunity ignore venereal diseases and as it is the duty of the state to protect the people from its ravages, there should be instituted through the state societies a propaganda of action looking towards a proper recognition of venereal diseases by the different legislatures and municipalities.

Your committee most respectfully recommends that this great national body of medical men should take the initiative step towards forming an American Society for Combating Venereal Diseases.

Public sentiment is ripe for such a step, and a national society a necessity. To facilitate the organization of such a society, the American Medical Association should appoint its accredited delegates from each state as a committee to organize in their respective states a State Society for Combating Venereal Diseases, with county branches, which should be in touch with the state societies.

That such state societies should send delegates (who hereafter must not necessarily be members of the House of Delegates of the American Medical Association) to the central society, known as the American Society for Combating Venereal Diseases, which should hold its yearly meetings either at the same time and place as the American Medical Association, or at any other convenient time and place. That the State Societies for Combating Venereal Diseases should issue periodicals and pamphlets to disseminate knowledge of venereal diseases, and that THE JOURNAL of the American Medical Association should be the official organ of the national society, known as the American Society for Combating Venereal Diseases.

That the learned professions, philanthropists, etc., should be invited to become members of each national, state or county societies.

That, if it so pleases, this honorable House of Delegates of the American Medical Association should retain this committee for further studies, directing it to act also as a central committee of the American Society for Combatting Venereal Diseases and to be in touch with the various state societies to be founded.

It is further proposed that the delegates of the American Medical Association, convened as the House of Delegates of the Fifty-fifth Annual Session, should become founders of the American Society for Combating Venereal Diseases and that they should meet and organize then and there under the auspices of the Committee on Prophylaxis of Venereal Diseases.

Your committee has until now cheerfully defrayed expenses for pursuing its studies. But inasmuch as the scope of its work becomes more extended from year to year, entailing a larger amount of correspondence and clerical service, it respectfully asks the House of Delegates for an appropriation of $200 to enable it to carry on its work unhampered by financial cares.

Within the short two years that this work has been intrusted to the Committee on Prophylaxis of Venereal Diseases of the American Medical Association, we are confronted with a surprising change of attitude concerning the social evil. The great and growing danger from venereal diseases, which permeates unchecked our population to a degree barely conceivable to the casual observer, the inoculation of guilty and innocents alike by a poison more serious and lasting in its consequences than any other contagious disease: the ravages, especially in the later manifestations, which outclass even those brought about by tuberculosis; and the deteriorating influence on the race and the generations yet to come, has finally awakened the profession and society at large from the habitual lethargy into an attempt at active interference. The way is paved: the time is ripe for action. Theoretical reasoning, committee labor, study of pertinent conditions, while desirable, have had their day. A propaganda of action having as its aim to interest the profession and especially to enlighten the broad masses of the importance and dangers of venereal diseases, is the next step in the crusade to attack the hydra which endangers humanity in the present and threatens it in the future.

In the opinion of the committee, the time has arrived for the organization of a National Society for the Study and Prevention of Venereal Diseases, and it is hoped that the American Medical Association will lend the weight of its influence for founding such a society.

Respectfully submitted,

HENRY D. HOLTON, LUDVIG WEIBE, GEORGE M. KOBER, W. H. SANDERS, L. DUNCAN BULKLEY, LOUIS E. SCHMIDT, Committee.

Report of the Committee on Scientific Research.

The Secretary, in the absence of the Chairman, Dr. Alfred Stengel, read the following report of the Committee on Scientific Research, which was referred to the Board of Trustees (page 1644).

REPORT OF THE COMMITTEE ON SCIENTIFIC RESEARCH.

Your committee would report that during the year grants have been made to the following: Drs. G. A. Ruediger, John T. Moore, H. E. Wetherill and Leo Loeb.

The report of Dr. Ruediger's work on "The Mechanism of Streptococcus Infection" will be reported to the Section on Pathology and Physiology at the present session. The researches of the other three men are still unfinished, but are sufficiently forward to justify the continuance of the grant. Dr. Moore is studying the question of etiology of relapses in malaria; Dr. Wetherill, the behavior of sweat secretion in fevers and uremia; and Dr. Loeb, the effect of radium on living tissues.

As far as possible, the committee has felt it desirable to extend aid to such workers as required costly materials or were not supported in their work by established institutions. It has further been the policy of the committee to offer grants for work proposed when the proposal was promising.

We believe that the continuance of the work of this committee will be beneficial in the cause of scientific research.

Resolution on Purification of the Mails.

Dr. H. L. E. Johnson, District of Columbia, offered the following resolution, which was referred to the Committee on Medical Legislation (page 1644).

Resolved, That the American Medical Association endorse the action of the Postmaster General in enforcing the statute which prohibits the use of the United States mails for the distribution of obscene advertisements and fraudulent compounds and appliances.

Resolution on Wood Alcohol as a Dangerous Poison.

Dr. Casey A. Wood, Illinois, presented the following from the Section on Ophthalmology, which was referred to the Auxiliary Committee on National Legislation (page 1644):

WHEREAS, The employment as beverages of wood spirit or methyl alcohol and its various preparations is known to have been responsible for numerous deaths and many cases of blindness in this country during the past few years; and

WHEREAS, Even the breathing of confined air charged with the fumes of this form of alcohol has been shown to produce blindness, it is

Resolved, That the House of Delegates of the American Medical Association, recognizing the dangerous character of wood alcohol and liquors containing it, believes that it should be placed on the list of poisons. It accordingly urges the proper federal and state authorities to take the necessary steps to protect life and eyesight from its pernicious influences.

Privileges Extended to New York Society Members.

Dr. E. Eliot Harris, New York, offered the following:

WHEREAS, The New York State Medical Association and the Medical Society of the State of New York have mutually agreed by an overwhelming majority of the combined membership to ratify the agreement to consolidate in one state medical organization on the plan of the New York State Medical Association, which is practically the same as the plan of the American Medical Association; and as the officers of both state associations have signed a petition to the Supreme Court for an order consolidating them as one state medical body:

Resolved, That the members of the Medical Society of the State of New York present at Atlantic City be permitted to register as the guests of this Association, with all the privileges of participation in the scientific work of the sections; and be it further

Resolved, That a copy of this resolution be sent to the chairman of each section.

It was moved that the resolution be adopted. Seconded and carried.

Amendment of Constitution Proposed.

Dr. W. T. Bishop, Pennsylvania, offered the following, which was laid over until the next day:

Resolved, That there be reconsidered the adoption of the report of the Committee on Constitution and By-laws insofar as it applies to lines 1 and 2, on page 10, of the printed report on Constitution, the words "its decision shall be subject to appeal to the House of Delegates," and that there be added after the word "Association," in line 1, the words, "and their decision shall be final."

Co-operative Committee on Walter Reed Memorial.

Dr. George M. Kober offered the following resolutions, which were referred to the Walter Reed Memorial Committee.

WHEREAS, The Walter Reed Memorial Association has been incorporated in the city of Washington for the purpose of securing sufficient funds to perpetuate in a fitting manner the memory of Dr. Reed in recognition of his distinguished achievements in the cause of humanity and scientific medicine; be it

Resolved, That the American Medical Association heartily endorses the object of the above-named organization in honoring the memory of an American physician whose work in point of importance and far-reaching beneficence ranks only second with Jenner's discovery of vaccination.

Resolved, That the American Medical Association earnestly recommends the appointment of a committee in all state and county medical societies for the purpose of co-operating with the Walter Reed Memorial Association in securing the necessary funds for the speedy accomplishment of this laudable undertaking.

On motion, the House adjourned until 9 a. m., Thursday, June 9.

Fifth Meeting—Thursday, June 9.

The House of Delegates met at 9 a. m., and was called to order by the President.

The minutes of the previous meeting were read and approved.

Invitation to Meet in Boston.

Dr. S. D. Presbrey, delegate from Massachusetts, and representing the Massachusetts Medical Society, extended an invitation to the Association to hold its next annual session in Boston.

On motion, this invitation was referred to the Committee on Transportation and Place of Session.

The Secretary also read a communication from the Secretary of the Massachusetts Medical Society, extending a cordial invitation to the Association to hold its next annual session in that city, which was likewise referred to the same committee.

On motion of Dr. McCormack, a vote of thanks was extended to the Massachusetts Medical Society for its invitation.

Greetings from Canadian Association.

The Secretary read the following from the president of the Canadian Medical Association: "Hearty fraternal greetings and best wishes to you and the Association from the Canadian Medical Association."

On motion of Dr. McCormack, these fraternal greetings were reciprocated.

Report of Committee on Rush Monument.

Dr. James C. Wilson, chairman, read the report of the Committee on the Rush Monument Fund:

Mr. President and Members:—Your Committee on the Rush Monument respectfully reports as follows: The monument, which has been fully described in THE JOURNAL, has been erected on the grounds of the U. S. Museum of Naval Hygiene and Medical School, in Washington, D. C., a site very appropriate and one originally designated by the Secretary of the Navy at the request of the late Dr. Albert H. Gibon, the chairman of the committee.

The unveiling, as has been announced in THE JOURNAL, will take place on Saturday, June 11, 1904, at 5 p. m.

Addresses will be delivered by the President of the American Medical Association, the chairman of the committee and the President of the United States. Cards of invitation have been issued to the Trustees, officers and members of the American Medical Association, and to the trustees and officers of certain organizations with which Benjamin Rush was especially interested, namely, Princeton University, the University of Pennsylvania, the College of Physicians of Philadelphia, and to the Cabinet officers, the heads of departments, and medical officers of the Army, Navy and Marine-Hospital Service now stationed in Washington.

The thanks of the committee are especially due and are hereby tendered to Mr. Perry, the sculptor, Mr. Metcalfe, the architect, and to the Henry-Bonnard Company of New York for the great interest they have taken in the work of the committee, and for the most artistic and satisfactory monument.

Your committee asks permission to defer its final report until the next session of the Association.

[See report of the unveiling on page 1633.]

Report of Committee on Scientific Exhibit.

Dr. F. B. Wynn, chairman, read the report of the Committee on Scientific Exhibit.

This report, on motion of Dr. Edwin Walker, was referred to the Reference Committee on Sections and Section Work, and the Committee was instructed to consult with the Board of Trustees and to report at this session (page 1645).

The committee was extended a vote of thanks for its splendid work.

Report of Committee on Reciprocity.

In the absence of Dr. W. L. Rodman, chairman of the Committee on Reciprocity, the secretary stated that this committee desired to report progress.

Delegates to International Congresses.

President Musser read invitations (1) from the Bureau of Education at the instance of the Secretary of State, to appoint delegates from the American Medical Association to attend the International Otological Congress, which meets in August this year at Bordeaux; (2) appointment of delegates to the Roentgen Ray Congress, which meets in Berlin, 1905; and (3) an invitation from the organization committee of the International Congress of Medicine to appoint an organizing committee of twelve or fifteen to take up the organization in this country.

On motion of Dr. W. T. Bishop, the President was empowered to appoint any members as delegates who desired to attend these meetings and whom he might designate.

Resolution on Leprosy Offered.

Dr. L. Duncan Bulkley presented a resolution from the Section on Cutaneous Medicine and Surgery in regard to leprosy, which was referred to the Reference Committee on Hygiene and Public Health (page 1645).

Publications on Venereal Diseases.

The Secretary read a communication from the Section on Hygiene and Sanitary Science with reference to the publication of reports and discussions on venereal diseases, which was referred to the Board of Trustees.

Committee on Cancer Investigation Proposed.

The Secretary read a communication from Dr. Hemmeter, Baltimore, with reference to the organization and the appointment of a Committee on Collective Cancer Investigation, which was referred to the Reference Committee on Hygiene and Public Health (page 1645).

Report of Committee on Legislation.

Resolution on Purification of the Mails Adopted.—Dr. C. A. L. Reed presented the following report:

The National Auxiliary Congressional and Legislative Committee, to whom was referred the resolution [page 1643] indorsing "the action of the Postmaster-General, in enforcing the statute which prohibits the use of the United States mails for the distribution of obscene advertisements and fraudulent compounds and appliances, respectfully report that they have had the same under consideration, and that they recommend the adoption of the resolution.

On motion of Dr. Craig, the report was adopted,

Resolution on Wood Alcohol Adopted.—Dr. Reed read the following in regard to the resolution offered by the Section on Ophthalmology (page 1643):

The National Auxiliary Congressional and Legislative Committee, to whom was referred the resolution urging the proper federal and state authorities to take the necessary steps to protect life and eyesight from the pernicious influences of wood spirit or methyl alcohol and its various preparations, respectfully report that they have had the same under consideration, and that they advise the adoption of the resolution.

On motion, the report was adopted.

Report on Medicine and Food Bureau Not Concurred In.—Dr. Reed read the following:

The National Auxiliary Congressional and Legislative Committee, to whom was referred the report [page 1640] of the Committee on National Bureau of Medicines and Foods and the accompanying resolutions, respectfully report that they have had the same under consideration, and that they recommend the adoption of the resolutions.

Dr. E. Eliot Harris, New York, moved the adoption of the report and its consideration in the committee of the whole of the House of Delegates immediately. Carried. The House then went into the committee of the whole.

Dr. E. Eliot Harris, New York, was appointed chairman.

After considerable discussion, the committee arose, and the House of Delegates was called to order by President Musser.

The chairman of the committee of the whole reported to the House that the committee had instructed him to report unfavorably on the report of the special Committee on Medicines and Foods.

Journal Clearing House Commission Rejected.—He further reported instructions that the report on the communication from the Michigan State Medical Society (pages 1576 and 1579) was laid on the table.

On motion of Dr. F. W. McRae, the report of the committee of the whole was adopted, and the original Committee on Medicines and Foods discharged.

Report of Committee on Reapportionment Adopted.

Dr. W. S. Foster, chairman, presented the report of the Committee on Reapportionment which, on motion of Dr. Ellis, California, was adopted.

The Committee on Reapportionment of Delegates, for the respective states and territories for 1905, 1906 and 1907, beg leave to report as follows:

State.	Members.	Delegates.	State.	Members.	Delegates.
Alabama	1295	3	Missouri	1400	3
Arizona	35	1	Montana	39	1
Arkansas	711	2	Nebraska	616	2
California	1505	4	New Hampshire	250	1
Colorado	518	2	New Jersey	1122	3
Connecticut	606	2	New Mexico	33	1
Delaware	134	1	New York	1704	4
Dist. of Columbia	447	1	North Carolina	800	2
Florida	239	1	North Dakota	115	1
Georgia	650	2	Ohio	2451	5
Hawaii	1	1	Oklahoma	163	1
Idaho	75	1	Oregon	223	1
Illinois	2021	5	Pennsylvania	3799	8
Indian Territory	148	1	Rhode Island	274	1
Indiana	1547	4	South Carolina	327	1
Iowa	1511	4	South Dakota	180	1
Kansas	562	2	Tennessee	1004	3
Kentucky	1361	3	Texas	2221	5
Louisiana	810	2	Utah	80	1
Maine	461	1	Vermont	408	1
Maryland	715	2	Virginia	1089	3
Massachusetts	2681	6	Washington	420	1
Michigan	1672	4	West Virginia	600	2
Minnesota	1033	2	Wisconsin	1185	3
Mississippi	606	2			

Report of Reference Committee on Constitution.

Permanent Committee on Sections Not Approved.—Dr. M. L. Harris, chairman of the Reference Committee on Constitution and By-laws, presented the following report:

Resolved, That this committee report to the House of Delegates that in its opinion a permanent committee on sections and section work [page 1640], "to direct and advise in matters of section work," "to effect and maintain needed reforms," and "to devise ways and means of preparing the programs," would interfere with the prerogatives and autonomy of the chairmen and secretaries of the various sections, and therefore do not recommend the appointment of such a committee.

On motion, the report was adopted.

Proposal to Make Trustees Active Members of House of Delegates.

Dr. R. C. Moore, Nebraska, offered the following:

WHEREAS, The members of the Board of Trustees are only *ex officio* members of this House, without a vote: therefore, be it

Resolved, That Article IX. Section 3, of the Constitution, does not apply to members of the Board of Trustees.

The resolution was referred to the Reference Committee on Constitution and By-laws, with instructions to report this afternoon (page 1645).

Report on Time of Meeting of State Associations Adopted.

Dr. J. N. McCormack said that when the chairman of the Committee on Miscellaneous Business reported (page 1640) in regard to branch associations (page 1580) at a previous meeting of the House, the action taken on that report carried with it the report of the Committee on Organization recommending the time of meeting of state associations (page 1579). He therefore moved a reconsideration of the vote taken at a previous meeting, by which this matter was postponed for one year, in order that the recommendation may go to the secretaries of state associations at once. Carried.

Dr. McCormack then moved that the recommendation of the Committee on Organization with reference to the time of meeting of state associations be adopted, and the Secretary be instructed to send copies of the recommendation to the secretaries of the various state associations. Carried.

Report on Branch Associations Held Over.

Dr. McCormack moved that the report of the committee in regard to branch associations be postponed until the next annual session. Carried.

Resolution on Prophylaxis of Venereal Diseases.

Dr. Bulkley, New York, presented the following:

The conjoint meeting under the auspices of the Committee on the Prophylaxis of Venereal Diseases of the American Medical Association recommends to the House of Delegates the following preamble and resolution, urging their adoption and wide circulation:

WHEREAS, Syphilis and gonorrhœa have been abundantly shown to be the cause of incalculable damage and danger to the health and life of the community, both among those innocent and those guilty of sexual transgression: therefore

Resolved, That the American Medical Association earnestly call the attention of the profession to the matter, and urge that boards of health throughout the United States give serious attention to the same, with a view to securing proper protection against these diseases by legal measures.

These were referred to the Reference Committee on Hygiene and Public Health.

On motion, the House adjourned until 2 p. m.

Sixth Meeting—Thursday, June 9.

The House was called to order at 2:15 p. m. by the President.

Report on Status of Trustees in House of Delegates.

Dr. M. L. Harris, chairman of the Reference Committee on Constitution and By-laws, reported in regard to the resolution offered by Dr. Moore (page 1644) regarding Article IX, Section 3, of the Constitution, that the Board of Trustees were members of the House of Delegates, without the right to vote.

On motion of Dr. John B. Roberts, the report was adopted.

Election of Officers.

The House then proceeded to the election of officers, with the following result:

PRESIDENT.—Louis S. McMurtry, Louisville, Ky.

VICE-PRESIDENTS.—Edward Jackson, Denver; James Hall Bell, San Antonio, Texas; F. C. Shattuck, Boston; B. C. Pennington, Atlantic City.

SECRETARY.—George H. Simmons, Chicago.

TREASURER.—Frank Billings, Chicago.

TRUSTEES.—T. J. Happel, Trenton, Tenn.; W. W. Grant, Denver; Philip Marvel, Atlantic City.

PLACE OF MEETING.—Portland, Oreg.

ORATION ON MEDICINE.—Charles G. Stockton, Buffalo, N. Y.

ORATION ON SURGERY.—John Collins Warren, Boston.

ORATION ON STATE MEDICINE.—George Blumer, San Francisco.

Report of Reference Committee on Sections.

Honorary Members Elected.—The Reference Committee on Sections and Section Work submitted the name of Dr. A. Maitland Ramsay of Glasgow, Scotland, from the Section on Ophthalmology, and the name of Dr. A. Logan Turner of Edinburgh, Scotland, from the Section on Laryngology and Otology, who were recommended for honorary membership by those sections, with the recommendation that they be elected; and on motion, the recommendation was concurred in.

On motion, the House adjourned until 9 a. m. Friday, June 10, 1904.

Seventh Meeting—Friday, June 10.

The House met at 9:30 a. m., and was called to order by the President.

The minutes of the previous meeting were read and approved.

Report of Reference Committee on Sections.

Money for Scientific Exhibit Favored.—Dr. A. P. Ohlmacher, Ohio, presented the following report of the Reference Committee on Sections and Section Work (page 1644):

Resolved, That recognizing the intimate interest and great benefit to the American Medical Association of the scientific exhibit, we recommend to the Board of Trustees of this Association that an annual honorarium of five hundred dollars be granted to the director of the Scientific Exhibit.

Resolved, In view of the fact that Dr. F. B. Wynn has made such a striking success of this exhibit, we respectfully suggest to the House of Delegates that he be continued in the capacity of director of the Scientific Exhibit.

It was moved that the report of the committee be adopted, and the recommendation contained therein be referred favorably and referred to the Board of Trustees. Seconded and carried.

Report of Reference Committee on Hygiene.

Section on Hygiene to Carry on the Prophylaxis of Venereal Diseases.—Dr. J. N. Hurty, Indiana, chairman of the Reference Committee on Hygiene and Public Health, presented the following report concerning the second annual report of the Committee on Prophylaxis of Venereal Diseases (page 1641):

This is an able and full report, treating of the moral and sociological necessity of the prevention of venereal diseases. The Reference Committee on Hygiene and Sanitary Science recommends the acceptance of the report in general, but does not indorse the suggestion that "the time has arrived for the organization of a national society for the study and prevention of venereal disease," but believes that for the present the Section on Hygiene and Sanitary Science will be equal to the task of doing the work necessary for the opening of this important matter.

On motion of Dr. Craig, Pennsylvania, the report was adopted as read.

Committee for Cancer Research Advised.—Dr. Hurty presented the following report of the Reference Committee on Hygiene and Public Health:

This report concerns the recommendation of Dr. Hommeter, Baltimore, that this body appoint a committee for the collective and prophylactic study of cancer [see page 1644].

Your committee indorses this recommendation, and in turn urges the appointment of such committee.

On motion of Dr. Harris, Illinois, the report was adopted.

Leprosy Study Station Advised.—Dr. Hurty also presented the report of the Reference Committee on Hygiene and Public Health, with reference to the following resolutions, proposed by Dr. Cooper (page 1644), delegate from Hawaii:

WHEREAS, The acquisition by the United States of insular possessions, in which a considerable amount of leprosy exists, particularly in Hawaii, has increased the responsibility of the government in the case of those unfortunate beings; therefore, be it

Resolved, That the American Medical Association urges on the Federal authorities the establishment of an experimental station, including hospital and laboratories, at the leper settlement in the island of Molokai, Hawaii, for the investigation and study of leprosy, looking especially toward the cure of the disease.

Your Reference Committee on Hygiene and Public Health fully indorses these resolutions and urges their adoption.

It was moved and seconded that the report on these resolutions be adopted. Carried.

Report of Board of Trustees.

Medical Directory Approved.—Dr. M. L. Harris, Illinois, speaking for the Board of Trustees, said: The Board recommends that the House of Delegates consent to the publication, by the Editor of THE JOURNAL, after proper correspondence with the secretaries of state societies, and receiving their cooperation, of a directory of the members of the American Medical Association and of the state associations, by states, counties, etc.

On motion of Dr. W. T. Bishop, Pennsylvania, the recommendation was concurred in.

Amendments to Constitution Proposed—Manner of Election.

Dr. S. L. Jepson offered the following amendments to the Constitution:

Amendment to Chapter 7, Section 1 (page 7 as revised): Nominations for office, except that of the Treasurer, shall be made orally, but no nominating speech shall exceed two minutes in length. Any nominee receiving a majority of the votes cast shall be declared elected.

The Treasurer shall be nominated by the Board of Trustees.

Dr. J. N. McCormack offered the following amendments:

To amend Section 1, Chapter 4, of the By-laws by striking out section 1 and inserting in lieu thereof the following: "*Time of Elections.*—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the session."

And to amend Section 3 of the same chapter by striking out said section and inserting in lieu thereof the following: "Nominations for President shall be by ballot. All other officers shall be nominated by a committee of seven, representing the various geographical divisions of the country as nearly as may be.

These will lie over until next year.

Proposed Change of Name of Materia Medica Section.

The Secretary read the following communication:

To the House of Delegates:

The Section on Materia Medica, Pharmacy and Therapeutics, at a largely attended meeting, having received the report of the change of your honorable body of the present name of the section to that of "Pharmacology," by unanimous vote, 2:30 p. m. to-day, request that the title of the Section be "Pharmacology and Therapeutics."

Accordingly, Dr. G. Eliot, Connecticut, offered the following amendment:

Proposed amendment to the By-laws: Chapter 8, Section 1: That the name of the Section of Pharmacology be changed to the Section of Pharmacology and Therapeutics.

This will lie over until next year.

Report of Judicial Council.

Dr. F. H Wiggin, N. Y., secretary, presented the following report of the Judicial Council:

The Judicial Council has received a protest in regard to the registration of Dr. J. R. Care, Morristown, Pa., and after considering the evidence presented, decided that his registration should be cancelled.

On motion of Dr. Roberts, Pennsylvania, the report was adopted.

Report of Committee on Reapportionment.

Dr. W. S. Foster, Pennsylvania, submitted an additional report of the Committee on Reapportionment (page 1644), relating to the State of New York, namely, that the General Secretary shall on May 1, 1905, obtain from the secretary of the constituent Association of the State of New York the number of members belonging to that organization, and shall apportion to that state a delegate for each five hundred of its actual active members and minor fraction thereof, which apportionment shall prevail for the years 1905 to 1907.

On motion of Dr. W. T. Bishop, Pennsylvania, the report of the committee was adopted.

Association Committees.

The following committees were appointed:

On Scientific Exhibit.—F. B. Wynn, Indianapolis, Director.

On Scientific Research.—Alfred Stengel, Philadelphia, Chairman; William Osler, Baltimore; L. Hektoen, Chicago.

On Organization.—J. N. McCormack, Bowling Green, Ky., Chairman; P. Maxwell Foshay, Chicago; George H. Simmons, Chicago.

On Rush Monument.—James C. Wilson, Philadelphia, Chairman; Henry D. Holton, Brattleboro, Vt., Treasurer; L. Duncan Bulkley, Connecticut; Frank Billings, Chicago; Wm. L. Rodman, Philadelphia.

Medical Legislation.—Charles A. L. Reed, Cincinnati, Ohio, Chairman, one year; W. L. Rodman, Philadelphia, two years; William H. Welch, Baltimore, three years.

On Transportation and Place of Session.—M. L. Harris, Chicago, Chairman; John C. Munro, Boston; G. C. Savage, Nashville, Tenn.; W. A. Jayne, Denver; H. Bert Ellis, Los Angeles, Cal.

On National Incorporation.—Joseph D. Bryant, New York, Chairman; H. L. E. Johnson, Washington, D. C.; D. S. Fairchild, Des Moines; Leartus Connor, Detroit; C. G. Kenyon, San Francisco.

On Reciprocity.—W. L. Rodman, Philadelphia, Chairman; S. D. Van Meter, Denver; Jos. M. Mathews, Louisville; T. J. Murray, Butte, Mont.; Beverly D. Harison, Sault Ste. Marie, Mich.

Judicial Council.—P. Maxwell Foshay, Chicago, one year; D. C. Peyton, Indiana, two years; F. H. Wiggin, New York, three years; George Ben Johnston, Virginia, four years; W. B. Russ, Texas, five years.

Council on Medical Education.—W. T. Councilman, Massachusetts, one year; J. A. Witherspoon, Tennessee, two years; Charles H. Frazier, Pennsylvania, three years; Victor C. Vaughan, Michigan, four years; Arthur Dean Bevan, Illinois, five years.

Time of Next Session To Be Decided.

On motion of Henry D. Holton, Vermont, the time of the next annual session was left to the President, Secretary, and Chairman of the Committee of Arrangements.

Resolution of Thanks.

Dr. J. N. McCormack, Kentucky, offered the following resolution of thanks:

Resolved, That the thanks of this Association be hereby tendered to the profession and citizens, and especially to the ladies, of Atlantic City, for their hospitality and entertainment during this session; to the presidents for the able and impartial manner in which they have conducted the business during the year in presiding over our deliberations; to the transportation companies for reduced rates; to the trustees of schools for the use of this building, and to all others who have in any way contributed to the entertainment and hospitality of the members of the Association.

On motion the resolution was unanimously adopted, after which the House of Delegates adjourned *sine die*.

Members of House of Delegates.

ALABAMA.

Robinson, W. H.
Morris, L. C.
Sanders, W. H.

ARKANSAS.

Dunavant, H. C.
Holland, T. E.

CALIFORNIA.

Kenyon, C. G.
Jones, Philip Mills.
Wills, W. Le Moyne.
Ellis, H. Bert.

COLORADO.

Jayne, W. A.
Ashley, W. W.

CONNECTICUT.

Bulkley, L. D.
Eliot, Gustavus.

DELAWARE.

Marshall, G. H.

DISTRICT OF COLUMBIA.

Kober, G. M.

FLORIDA.

Porter, J. Y.

GEORGIA.

McRae, Floyd W.
Morgan, J. B.

HAWAIIAN TERRITORY.

Cooper, Charles B.

IDAHO.

Maxey, Ed. E.

ILLINOIS.

Harris, M. L.
Plummer, H. C.
Moyer, Harold N.
Hunt, C. C.
Black, Carl E.
Webster, Geo. W.
Eyster, G. L.
Norbury, Frank P.

INDIANA.

Walker, Edwin.
Dougherty, C. A.
Wishard, W. N.
Peyton, D. C.

INDIAN TERRITORY.

Long, Le Roy

IOWA.

Bailey, Samuel.
Dorr, E. E.
Knott, Van Buren.
Bierring, W. L.

KENTUCKY.

Price, A. D.
Ellis, Chas. M.
Earle, Jr., S. T.
Vance, Ap. Morgan.
McCormack, J. N.

LOUISIANA.

Perkins, W. M.

MAINE.

Thayer, Aug. S.

MARYLAND.

Stetson, H. G.
Prentiss, S. D.
Ames, E. P.

MICHIGAN.

Walker, H. O.
Vaughan, V. C.
Stockwell, C. B.

MINNESOTA.

Davis, Wm.
Hall, W. A.

MISSISSIPPI.

Williams, D. J.
Harrison, W. H.

MISSOURI.

Jackson, Jabez N.
Kleffer, A. R.
Dorsett, W. B.

MONTANA.

Campbell, Donald.

NEBRASKA.

Moore, R. C.

NEW HAMPSHIRE.

Prouty, Ira J.

NEW JERSEY.

Kipp, C. J.
Ward, John W.
Halsey, L. M.

NEW MEXICO.

McConnell, J. Frank.

NEW YORK.

Lester, Elias.
Bryant, Joseph D.
Harris, E. Eliot.
Grosvenor, J. W.

NORTH CAROLINA.

Healy, H. H.
Way, J. Howell.

NORTH DAKOTA.

Stickney, V. H.

OHIO.

Reed, C. A. L.
Marchand, J. F.
Beck, J. S.
Sawyer, J. P.
Hubbard, Thos.

OREGON.

McKenzie, Kenneth A. J.

PENNSYLVANIA.

Bishop, W. T.
McConnell, H. S.
Roberts, J. B.
Welch, W. M.
Craig, A. R.
Foster, W. S.
Guthrie, G. W.
Lowman, W. B.

RHODE ISLAND.

Champlin, John.

SOUTH CAROLINA.

Patterson, E. L.

SOUTH DAKOTA.

Rock, H. J.

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TENNESSEE.
Nelson, D. E.
Eve, Duncan.
Herron, T. J.

TEXAS.
McLaughlin, J. W.
Ross, W. B.
Knox, R. W.

UTAH.
Baldwin, S. C.

VERMONT.
Holton, H. D.

VIRGINIA.
McGuire, Stuart.
Johnston, Geo. Ben.

WASHINGTON.
Dewey, H. W.

WEST VIRGINIA.
Barber, T. L.
Jepson, S. L.

WISCONSIN.
Sarles, W. T.
Seaman, G. E.

U. S. PUBLIC HEALTH AND M. H. S.
Wyman, W.

MED. DEPT. U. S. ARMY.
Borden, William C.

MED. DEPT. U. S. NAVY.
Marmion, R. A.

OBSTETRICS AND DISEASES OF WOMEN.
Manton, W. P.

SURGERY AND ANATOMY.
Fairchild, D. S.

HYGIENE AND SANITARY SCIENCE.
Hurty, J. N.

OPHTHALMOLOGY.
Wood, Casey A.

DISEASES OF CHILDREN.
Tuley, H. E.

STOMATOLOGY.
Baldwin, A. E.

NERVOUS AND MENTAL DISEASES.
Langdon, F. W.

CUTANEOUS MEDICINE AND SURGERY.
Schamberg, J. F.

MATERIA MEDICA, PHARMACY AND THERAPEUTICS.
Robinson, W. J.

PATHOLOGY AND PHYSIOLOGY.
Ohlmacher, A. P.

LARYNGOLOGY AND OTOLOGY.
Richards, G. L.

PRACTICE OF MEDICINE.
Jones, Frank A.

OFFICIAL MINUTES—GENERAL MEETINGS.

First General Meeting—Tuesday, June 7.

The Association met at 11 a. m., at Marine Hall, Young's Pier, Atlantic City, and was called to order by President Billings.

The President invited all vice-presidents, ex-presidents and ex-vice-presidents of the Association to take seats on the platform. There were seated on the platform Drs. G. C. Savage, George F. Jenkins, Henry O. Marcy, John A. Wyeth, Joseph M. Mathews, Charles A. L. Reed, C. Lester Hall, Alonzo Garcelon, Surgeon-General Geo. M. Sternberg, W. W. Keen, and George H. Simmons.

Mayor's Address of Welcome.

Prayer was offered by the Rev. William Aikman, Atlantic City, after which President Billings introduced the Hon. Franklin P. Stoy, mayor of Atlantic City, who delivered an address of welcome.

He said, in part, that this was not the first opportunity he had had to address the members of the Association, and he felt it a pleasure and an honor, in behalf of the City of Atlantic City, to extend a hearty welcome to the seaside resort, and in extending this welcome he extended also the freedom of the city. Every effort had been put forth to make the occasion a pleasant one. During the meeting he had suspended business at the City Hall. He hoped that the members would take advantage of the freedom of the city during their stay. Again, he thanked the Association for the great pleasure in being with them, and hoped that when the members were looking over the United States for a place of meeting they would not forget that the latchstring of Atlantic City was always hanging outside. (Applause.)

Welcome from Atlantic City Profession.

President Billings introduced Dr. T. K. Reed of Atlantic City, who delivered an address of welcome on behalf of the local medical profession. Among other things, Dr. Reed said:

Those who know our local history best say that the doctors made Atlantic City, therefore we welcome you to-day to your home, and you may well feel proud of your progeny, for she possesses health, youth and beauty. Moreover, with that rare juvenile wisdom which never fails to elicit admiration, she gives you a cordial greeting inspired by filial affection. This fair creature holds within her grasp a cornucopia of hygienic blessing.

As you stand on the shore and look out on the broad and briny ocean, however, you may be tempted to quote "Water, water everywhere, and not a drop to drink." But I assure you there is a counterpoise to our dry atmosphere, and you will find an abundance of pure water, with beverages of every kind and color, both plain and sparkling, to allay your thirst and cheer your weary souls.

There can be no doubt about the salubrity of our climate, and it is an undeniable fact that everybody here lives till he dies. (Laughter.) Just what would happen, though, if the American Medical Association could abide with us always, is a question. Possibly, with the aid of bacteriology and modern scientific methods, some of our inhabitants might survive the period named.

Dr. Reed said that the originator of the scheme of transforming the island into a health resort was a physician, Dr. Jonathan Pitney of Absecon. He was likewise the promoter of the first railroad to this beach. When the problem arose as to whether they should construct a dam or span Absecon Creek with a bridge, the Doctor told the engineers it would be cheaper to build a bridge, and added, "To tell the truth, Absecon is not worth a dam."

Dr. Reed concluded his remarks as follows:

Gentlemen, your aims are high and unselfish. You are a grand brotherhood among whom there is no strife or sectional animosity. You are devotees of science, and yet your Shibboleth is the good of mankind. Your profession is the hope and reliance of every phase of humanity. Hard-working and self-sacrificing colleagues! Heroes of unsung epics, who have faced with dauntless courage deadly contagions and infections! You have stormed many a San Juan hill in your daily calling. Furthermore, you are human comforters in the hour of sickness, sorrow and affliction.

In the name of the medical fraternity of Atlantic City, I extend to you a warm welcome, with the sincere wish that you may have a jovial and profitable time during your stay here, and that you will please and honor us by coming again as soon as possible. (Applause.)

Response to Address of Welcome.

Dr. G. C. Savage, Tennessee, First Vice-President of the Association, was introduced and responded felicitously to the address of welcome. He referred to the rapid growth of the Association and paid a high compliment to Dr. J. N. McCormack, saying that he deserved not only great credit, but the highest praise, for what he had done toward perfecting methods of organization. He hoped and predicted that the time would come when there would be established a department of public health by Congress, and a member of the Association be appointed as its secretary and as a cabinet officer. He thanked Mayor Stoy and Dr. Reed, as well as the citizens of Atlantic City, for the hearty welcome they had extended.

Report of the Committee of Arrangements.

Dr. B. C. Pennington, Chairman of the Local Committee of Arrangements, presented the following report:

Mr. President and Gentlemen:

Your committee has little to report beyond the matters submitted to you in the program. The Honorable Franklin P. Murphy, Governor of New Jersey, was to have welcomed you to our state. The Transatlantic steamer, on which he was a passenger, was long overdue. The governor sends his regrets that he cannot welcome you in person, but bids me to say to you that New Jersey extends to you a very cordial welcome, and trusts that your stay will not be without pleasure and profit.

In returning to Atlantic City so soon after your last visit, we feel greatly complimented. Our action has been with your confidence in our ability to provide entertainment for such a large association. This association has grown to such colossal proportions that it is no light task to provide for its entertainment. The mere providing of money to meet its running expenses has been but a proportion of the work of your committee. The size of the numerous sections and the necessity of grouping them in close proximity, with the other details, too numerous to mention, has been the greatest work of your committee, and while I am sure we have made mistakes, I trust they are few and unavoidable.

Your committee realized that the success or failure of this meeting depended on them, and each one has performed his part with commendable zeal and intelligence. To each one of them I extend my heartfelt thanks for their counsel and help; also to the hotel men of Atlantic City for their gift of nearly $5,000 to make this session possible.

Introduction of the Reed Memorial Fund.

At the conclusion of the reading of the report of the Local Committee of Arrangements, President Billings said:

At the meeting held in New Orleans, the House of Delegates appointed a committee, which was known as the Major Walter Reed Monument Committee. This committee is composed of Drs. W. W. Keen, Joseph D. Bryant, Victor C. Vaughan, A. T. Cabot, T. S. Cullen, and the President of the Association was made an ex-officio member. Major Walter Reed died a year and a half ago. To the medical world no word is necessary to say of Reed to know who he was. The lay public does not know him, and I am afraid the medical public do not appreciate what he did and do not now appreciate all he did. Had Reed, as a major in the army, performed an act of conspicuous bravery of equal magnitude to that which he did for medicine, his name would never die. Had he as a civilian performed an act which would have conserved the commerce of the world to an equal degree, his name would never die. It seems to us who are interested in this subject, that this morning, when the greatest body of us

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are gathered together, something should be said on this subject, and I will ask Dr. Keen, chairman of the committee, to say a word or two.

Announcement of Subscription List for Reed Memorial.

Dr. W. W. Keen said:

I shall only say a word or two in reference to the report of this committee. As a matter of fact, the Walter Reed Memorial Association is now an incorporated body in the District of Columbia. The president of it is a man known throughout the country, Dr. Daniel C. Gilman, formerly president of Johns Hopkins University, and now president of the Carnegie Institution. It is, therefore, a body thoroughly equipped for the purpose of caring for any funds which may be contributed to it. It is our hope this morning that we shall raise not less than ten thousand dollars, for this sum is requested and due from the profession which Walter Reed adorned by his splendid scientific work, and from his country to whom his services were dedicated. (Applause.)

Welch's Eulogy of Reed.

President Billings asked Dr. William H. Welch, of Baltimore, to say a few words. Dr. Welch said:

I respond with very great pleasure and enthusiasm to the invitation of the committee of this Association to say a few words concerning the necessity of stirring up the sentiment and enthusiasm of the members of the association in behalf of this great memorial to Walter Reed. His services to mankind is to be paralleled only in two or three instances. It is a service to which we can all respond with an unusual degree of enthusiasm. Every feature connected with it is one that should appeal to the members of the profession. Walter Reed himself was a man of unusual charm of personality; a man of the very highest character; a man with a pure love of truth; a man who was scientifically trained to undertake the work which he did. The discovery which he made is one which is peculiarly American. He was trained entirely in this country to undertake this work and he undertook it with a complete and adequate training for the purpose. The work was undertaken under the auspices of our National Government at a time when we were in military control of the Island of Cuba. In addition to that, the scientific basis of the work is one which should appeal to us. It was an admirable, a classical piece of scientific investigation. No one can read the steps by which Reed reached his conclusions without feeling that the basis of the work is entirely sound, and that it was carried out by experiments of very great ingenuity.

The discovery itself, as I have remarked, has but one or two parallels in our profession. I think we can put it second to the discovery of the control of smallpox by vaccination. It means nothing less than the control of that most dreaded scourge—yellow fever. It is a discovery which rests on a scientific foundation, which has been put to a practical test, and that test has resulted in a complete extermination of yellow fever from the Island of Cuba. (Applause.) It will result in the control of the disease elsewhere. It has already produced important results in South America. In Rio, at the recent Latin-American Congress, it is interesting to note that the weight of sentiment was entirely in support of Reed's conclusions. I say, then, it is a discovery of the first magnitude, for which we have no parallel in this country. It is the conquering of a foe, a far greater foe than we conquered in the war with Spain. What was our foe there in comparison with yellow fever?

I feel that this appeal should come, in the first instance, from the medical profession. It is an appeal which will be responded to not only by the American medical profession, but by those men when it is properly presented to the great commercial bodies and business interests of this country. The chambers of commerce should contribute largely. When we consider that the cost of yellow fever in one epidemic, that of 1878, is estimated to have exceeded one hundred million dollars, you can readily see that this is an appeal to the business men of this country who are capable of contributing much more than the members of the medical profession. This is a practical initiation of the movement here to-day. There have been preliminary steps to have members of this Association respond liberally to the fund, and it is thought that we can go before these commercial bodies to which I have referred with a prospect of success. I feel, therefore, like re-enforcing in every way the sentiment which has been expressed by Dr. Keen. The nature of the memorial is yet to be determined. It will probably be in the form of a visible monument to Major Reed. This is in the hands of an incorporated association, the members of which give every guarantee that wisdom will be exercised in the control of the funds and in the manner of use of the funds. (Applause.)

Eight Thousand Dollars for Reed Memorial.

Dr. Theodore Diller, Pittsburg, spoke briefly of the work of Major Walter Reed, after which Dr. Keen appealed to the members of the Association for personal contributions. Nearly $8,000 was subscribed. (A report of these contributions will appear in THE JOURNAL later.)

The President's Address.

President Billings said:

As the presiding officer of this Association, the last act of my official life is one that affords me as much, if not the greatest, pleasure of all, and that is to hand to a successor of strength the executive control of this Association. Ladies and gentlemen, it affords me great pleasure to introduce to you the President of the Association, Dr. John H. Musser, of Philadelphia. (Applause.)

Dr. Musser then delivered his address. (This appeared in THE JOURNAL, June 11.) The meeting adjourned.

Second General Meeting—Tuesday, June 7.

The meeting was called to order at the First Presbyterian Church by President Musser.

Dr. George Dock, Ann Arbor, Mich., delivered the Oration on Medicine. (See THE JOURNAL, June 11.)

Following the delivery of Dr. Dock's oration was a symposium regarding institutions doing research work for the science of medicine, as follows:

"The Carnegie Institution," by Dr. John S. Billings, New York City.

"The Rockefeller Institute," by Dr. L. Emmett Holt, New York City.

"The Memorial Institute for Infectious Diseases," by Dr. Frank Billings, Chicago.

"Research Work at the Harvard Medical School," by Dr. Harold C. Ernst, Boston.

"The William Pepper Laboratory of Clinical Medicine," by Dr. Alfred Stengel, Philadelphia.

These addresses will appear later.

Report of Committee on Portraits of Ex-Presidents.

Dr. J. R. Pennington, Chicago, chairman of the Committee on Portraits of ex-Presidents of the Association, stated that he had secured for the Association a portrait of another ex-President, and that Dr. John A. Wyeth would formally present the portrait to the Association. (Applause.)

Presentation of Portrait of Marion Sims.

Dr. Wyeth spoke as follows:

Mr. President, Ladies and Gentlemen:

Twenty-eight years ago Dr. J. Marion Sims presided over this Association; twenty-one years ago he died. Bound as I am by the ties of an affectionate friendship to the memory of this immortal man, I would not trust myself to speak to you of his personal character and private life, so tender, noble and true. And what need is there for me to speak to members of this Association of his professional career, from the humble beginning in the log cabin in a newly-settled district of Alabama to become the leading surgeon of the metropolis of the western continent and thence to the capitals of Europe and the palaces of emperors and kings. In presenting to you, at the request of this Association, this portrait, the gift of his daughter, let the words of a famous co-laborer in the field of gynecology, Prof. T. Gaillard Thomas, go with it. Three years ago, in speaking to the graduating class of the medical department of Cornell University, he closed an eloquent address with these words: "If I were called on to name the three men who in all history had most benefited mankind, I would say, Edward Jenner, George Washington and Marion Sims." (Applause.)

Dr. Pennington then unveiled the portrait of Dr. Sims amid prolonged applause.

On motion of Dr. Victor C. Vaughan, Michigan, a hearty vote of thanks was extended to Mrs. John A Wyeth for the presentation of the portrait of her father.

The meeting then adjourned.

Third General Meeting—Wednesday, June 8.

The meeting was called to order at 7:40 p. m. in the First Presbyterian Church by the First Vice-President, Dr. G. C. Savage, Nashville, Tenn.

Oration on Surgery.

Dr. W. J. Mayo, Rochester, Minn., delivered the Oration on Surgery (printed in THE JOURNAL June 11), after which there was a symposium on "Mutual Relations and Duties of Government Medical Service and the Profession."

Symposium on Government Services.

Short papers were presented as follows:

What Can the Medical Departments of the Army, of the Navy, and of the Public Health and Marine-Hospital Service Do for Medical Science? By Dr. V. C. Vaughan, Ann Arbor, Mich.

What Can the Medical Profession Do for the Army? By Dr. William C. Borden, Major Surgeon, U. S. Army.

What Can the Medical Profession Do for the Navy? By Surgeon C. F. Stokes, U. S. Navy.

What Can the Medical Profession Do for the Public Health and Marine-Hospital Service? By Surgeon-General Walter Wyman, U. S. P. H. and M.-H. S.

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On account of the length of these minutes, these addresses are held until a later issue for publication.

The meeting adjourned.

Fourth General Meeting—Thursday, June 9.

The meeting was called to order at 7:40 p. m. by the Second Vice-President, Dr. Isadore Dyer, New Orleans, who introduced Dr. H. M. Biggs, New York City.

Oration on State Medicine.

Dr. Biggs delivered the Oration on State Medicine, following which was a symposium on The Departments of Scientific Research of the Government.

Bureau of Animal Industry.

Dr. William H. Welch, Baltimore, spoke of "The Bureau of Animal Industry and Its Service to Medical Science," saying that this bureau was founded in 1884 for the purpose of promoting animal industry in this country and for the investigation, study and control of those diseases of animals which caused the greatest losses. The diseases of animals were in part those to which human beings were also subject. Comparative pathology, which was represented in the Bureau of Animal Industry, bore close relations to human pathology. He spoke of the possibility of great light being shed on the problems of medicine by studying and investigating the diseases of animals. Not a few of the diseases of animals, such as trichinosis, glanders, anthrax, rabies, and above all, tuberculosis, might affect human beings.

Since he had been in Baltimore he had been in close relation with the bureau and was more or less familiar with the scientific work carried on by it. The bureau had practically eradicated from this country that great pestilence of cattle, namely, pleuropneumonia, a disease which had caused a loss to cattle raisers in this country running up into millions of dollars annually. Fortunately, the disease had not extended west of Chicago through the vigilant and untiring efforts of the bureau.

He was also familiar with the work of the bureau in the study of hog cholera, and said that most important scientific work regarding this disease had been done by those actively connected with the bureau. Indeed, it might be said that the bacillus of hog cholera was discovered by the Bureau of Animal Industry.

Speaking of rabies, he said that Dr. Salmon had proven by trustworthy statistics that this disease is not uncommon among lower animals, and had pointed out measures for regulating its spread. He referred to the excellent work done by Stiles in regard to animal parasites. Over ten years ago some of the most important problems relating to animal tuberculosis and its relation to human tuberculosis were taken up. Dr. de Schweinitz, one of the pioneer workers in the department, had pointed out that artificial immunity could be brought about by the use of attenuated cultures. Behring believed that by the application of this method it was possible to control the spread of this disease among cattle.

The bureau is to be congratulated, he said, on the excellent work it has done, and should receive the support of the medical profession of this country in its behalf. Dr. Welch expressed the hope that our national legislators would take as much interest in the study of human diseases as they had already manifested in the study of animal diseases.

Dr. D. E. Salmon, chief of the bureau, then read a paper on "What the Medical Profession Can do for the Bureau of Animal Industry." This is reserved for later publication.

Bureau of Chemical and Medical Science.

Dr. H. W. Wiley, Washington, D. C., discussed the "Bureau of Chemistry and Medical Science." Among other things, he stated that the Bureau of Chemistry undertook many investigations which were closely related to medical science. Many of these were mentioned. He referred to the great problem of the disposal of garbage in large cities, and stated that if some economic method could be devised which would make it easier of accomplishment, great good will have been done. He discussed the problem of disposal of sewage, and of the investigations and examinations carried on by the bureau with reference to every kind of human food almost for adulterations and sophistications, saying that numerous bulletins had been published containing the results of these investigations. He said almost all forms of food were, to a large extent, subject to adulteration, and spoke of the manner in which food products were controlled in this country. The bureau was endeavoring to aid the states in their fight against the domestic adulteration. Another thing was the inspection and control of drugs carried on by the bureau. Congress had authorized the Bureau of Chemistry to inspect drugs in regard to their adulteration, not only those made in this country, but those made abroad. The bureau was doing all it could to expose secret nostrums and to determine the character of the remedies used. Secret remedies were great evils. Drugs should be dispensed by reputable physicians; laymen were not capable of prescribing for themselves by means of the circulars and advertisements of the character which usually reached them through the mails. The Association could help the Bureau of Chemistry in many ways by supporting it in the prosecution of its work.

Dr. H. D. Geddings of the United States Public Health and Marine-Hospital Service, Washington, D. C., read a paper on "The Hygienic Laboratory of the Marine-Hospital Service," which will be published in THE JOURNAL later.

The meeting then adjourned.

Closing General Meeting—Friday, June 10.

The General Meeting was called to order by President Musser at noon. He congratulated the Association on the closing of what had been in many respects the most successful convention the Association had ever held. In numbers it exceeded all others.

The symposia, which were a novel feature of the meetings, had been most instructive and of such worth that they would be continued at future sessions. They had served to make the members realize that they came to the session not for the sake of the evening entertainments or for the nightly joys of this great seaside resort, but for mental stimulus.

With these few remarks the General Meeting adjourned.

New Members.

List of new members for the month of May, 1904:

ALABAMA.

Fonde, G. H., Mobile.
Fields, B. T., Easley.
Broughton, L. L., Andalusia.

ARIZONA.

Coleman, J. W., Jerome.

ARKANSAS.

Scott, E. M., Hamburg.
Eberle, J. G., Ft. Smith.
Jenkins, J. S., Readleton.
Norman, Wm. S., Hamburg.
Strong, J. C., Forrest City.
Harrison, F. R., Fordyce.
Hare, J. L., Wynne.
Markham, R. A., Paragould.
Simpson, A. R., Corning.

CALIFORNIA.

Downs, A. J., Los Angeles.
Kress, G. H., Los Angeles.
Leonard, E. L., Los Angeles.
Williams, Thos. A., Oakland.
Lilliencrans, Guy H., Oakland.
Cross, Chas. V., San Francisco.
Fehlen, Aug., San Francisco.
O'Neil, A. A., San Francisco.
Lyon, S. B., Los Angeles.

COLORADO.

Dennis, F. L., Colorado Springs.
Coleman, O. E., Ft. Collins.

CONNECTICUT.

Hoyt, Curtiss C., Bridgeport.
White, Benj. W., Bridgeport.
Lauder, Robert, Bridgeport.
Thompson, Emma J., Hartford.
McCook, J. B., Hartford.
Stern, Chas. B., Hartford.
Steiner, Walter R., Hartford.
Craig, William P., Hartford.
Van Strander, W. H., Hartford.
Bacon, Leonard W., New Haven.
Maher, Stephen J., New Haven.
Nadler, Alfred G., New Haven.
Creamer-Peckham, Lucy M., New Haven.
Kingman, Jas. H., Middletown.
Diefendorf, Allen Ross, Middletown.
Mitchell, J. T., Middletown.
Mountain, J. H., Middletown.
Wells, E. A., Hartford.
Griswold, Fredk. P., Meriden.
Bradstreet, Edw. T., Meriden.
Cooke, Jos. A., Meriden.
Avery, Amos, Hampton.
Delaney, W. J., Naugatuck.
Holmes, Geo. J., New Britain.

DELAWARE

Robin, Albert, Wilmington.
Lewis, Dorsey W., Middletown.

FLORIDA.

Bush, Jos. D., Orlando.
Green, I. T., Tampa.
Cravey, J. E., Pensacola.

GEORGIA.

Strickler, Cyrus W., Atlanta.
Armstrong, Wm. B., Atlanta.
Ward, C. Pelham, Atlanta.
Deadwyler, M. F., Maysville.
Ware, D. B., Fitzgerald.

IDAHO.

Albee, D. P., Oakley.
Beeek, John, Boise.
Compton, F. W., Meridian.

ILLINOIS.

Nicholson, G. A., Chicago.
Forwalter, Jos., Chicago.
Blatchford, F. W., Chicago.
Teel, Ambrose W., Chicago.
Bernhardt, A. F., Chicago.
Pietrowicz, S. E., Chicago.
Bosler, Arthur G., Chicago.
Mullan, Eugene A., Chicago.
Cape, J. A., Chicago.
Franklin, Isaac J. Chicago.
White, Arthur W., Paxton.
Duncan, J. W. Pawnee.
Agler, Frank S., Bentley.
Taylor, Geo. G., Elkhart.
Dakin, R. G., Magnolia.

INDIANA.

Bauer, W. M., La Fayette.
Stover, C. J., Bates.
Liedenberger, L., French Lick.
Sharror, H. B., Hammond.
Truitt, Frank L., Noblesville.
Willits, A. J., Carroll.
Kamana, O. H., Seymour.
Dillabe, M. T., Monticello.

IOWA.

Matthey, H., Davenport.
Kinster, Lily, Dubuque.
Reed, L. D., Des Moines.
Mobley, W. H., Waterloo.
Bullock, A. H., Cushing.
Alton, W. E., Ft. Dodge.
Van Gordon, Jesse L., Bonaparte.
Dittmer, H. A., Manchester.
Dittmer, E. H., Manchester.
Nicol, J. H., Manchester.

KANSAS.

Greer, T. D., Edgerton.
Bowers, Chas. E., Wichita.

KENTUCKY.

Wilson, Dunning S., Louisville.
Trawick, J. D., Louisville.
Bruner, W. T., Louisville.
Brandeis, Florence, Louisville.
Thomasson, W. J., Newport.
Huddle, Garland R., Bowling Green.
Cecil, G. E., Flat Lick.
Foley, Thos. S., Pineville.

LOUISIANA.

Butterworth, W. W., New Orleans.
Hummel, E. M., Jackson.

MAINE.

Stubbs, E. H., Augusta.

MARYLAND.

Sampson, J. A., Baltimore.
Rosenthal, M. R., Baltimore.
Herring, A. P., Baltimore.
Stokes, Wm. S., Baltimore.
Lemmon, Randy Spring.
Lewis, John L., Bethesda.
Gray, Oliver J., Hebron.

MASSACHUSETTS.

Bridgman, Burt N., Boston.
Fairbanks, A. W., Boston.
Allen, G. W., Boston.
Reardon, T. J., Boston.
Wyer, Agnes C., Boston.
White, Leon E., Boston.
Lovett, R. W., Boston.
Smith, F. M., Boston.
Van Allen, H. W., Springfield.
Devine, W. H., South Boston.
Black, G. L., Lawrence.
Bacon, Thos. S., Springfield.
Trowbridge, Edw. H., Worcester.
Shattuck, A. M., Worcester.
Flood, Everett, Palmer.
Robertson, Fredk., Melrose.
Truesdale, P. E., Fall River.
Hunt, George P., Pittsfield.

MICHIGAN.

Haines, R. M., Three Rivers.
Remillard, J. L. P., Iron Mountain.
Gourdy, P. M., St. Joseph.
Wilson, Wm. L., St. Joseph.
Jenison, Chas. O., Greenville.
Snow, S. A., North Branch.
Fay, George E., Detroit.
Rosenthal, Jacob, Sault Ste. Marie.

MISSISSIPPI.

Montgomery, J. S., Starkville.
Cooper, I. W., Newton.

MISSOURI.

Kane, R. Emmet, St. Louis.
Padberg, L. E., St. Louis.
Nicks, H. G., St. Louis.
Link, J. J., St. Louis.
Dunlap, W. O., Sedalia.
Wright, Chas. G., Grandin.
Normen, J. B., California.
Widner, A. W., Newtown.
Collins, M. T., Sedalia.
Baker, N. F., Fulton.
Hickerson, E. M., Moberly.
Osborn, J. F., Henry.

NEBRASKA.

Chapman, W. H., Hastings.
Gibbons, C. E., Kearney.

NEW HAMPSHIRE.

Flanders, Chas. F., Manchester.

NEW JERSEY.

Graham, W. H., Atlantic City.
Hirst, L. B., Camden.
Marcy, F. W., Camden.
Van Reiver, J. E. L., Camden.
Isnard, Wm. R., Camden.
Clark, J. H., Carroll.
Becker, W. J., Newark.
Hedbloom, C. E., Elizabeth.
Hodson, R. W., Plainfield.
Smith, J. A., Beachwood.
Halliday, D. F., Bonnage.
Marcy, V. M. D., Cape May.
Rogers, Alex. W., Paterson.
Ware, J. W., Bayonne.
Long, Minerva B., Plainfield.
Synott, M. J., Montclair.
Todd, Francis H., Paterson.
Garrison, Jos. E., Ocean City.
Tower, Chas. G., Atlantic City.
Voorhees, Jos. S., Morton.
Tunison, G. O., Oxford.

NEW MEXICO.

Bullock, E. S., Silver City.
Ohlinger, L. R., Silver City.
Fisher, Eugene M., Roswell.

NEW YORK.

Love, F. W., Buffalo.
Lastig, Emil, Buffalo.
Pilford, H. G., New York.
Deutsch, Sigmund, New York.
Gwathmey, J. T., New York.
Lovengood, J., New York.
Hemingway, W. H., New York.
Lederer, W. J., New York.
Raven, C. J., Fulton.
Currie, Thos. J., Willard.
Barnette, J. A., Watertown.
Pierce, Chas. E., Watertown.
Herrick, C. H., Gilbertsville.
Moore, Geo. H., Ticonderoga.
Horne, A., Phelps.
Gilchrist, G. H., Groton.
Purdy, J. S., Seneca Falls.
Reddenbrant, De Witt C., Philadelphia.

NORTH CAROLINA.

Clemmonger, F. J., Asheville.
Drake, J. H., Asheville.
Caldwell, D. G., Concord.
Scott, Chas. L., Greensboro.
Jewett, E. D., Winston and Salem.
Harrison, Edmund, Greensboro.

OHIO.

Beede, T. M., Springfield.
Richards, Nancy D., New Philadelphia.
Mitchell, Frank M., Cambridge.
Mowry, David, Bellefontaine.
Eyestone, A. G., Gibsonburg.

OKLAHOMA.

Decker, A. J., Helena.

PENNSYLVANIA.

Neely, Elmer E., Allegheny.
McDonald, Frances T., Allegheny.
Arn, Gottfried, Allegheny.
Potts, J. Treichler, Allentown.
Woodward, C. E., West Chester.
Hunt, Jos. Slater, Easton.
Ludlow, David H., Easton.
Evans, M. R., Huntingdon.
Longwell, R. E., Johnstown.
Weickert, V. W., Reading.
Storley, J. R., Reading.
Kuhl, Geo. W., Reading.
Perry, Saml. W., New Castle.
Martin, Ella S., Pittsburg.
Sugsmith, Edwin, Pittsburg.
Barchfeld, A. J., Pittsburg.
Jackson, Jos. M., Pittsburg.
Winters, Geo. R., Pittsburg.
Chesnrown, A. V., Pittsburg.
Page, H. P., Philadelphia.
Town, E. C., Philadelphia.
Rhein, R. D., Philadelphia.
McDougald, J. Q., Philadelphia.
Dougherty, Henrietta M., Philadelphia.
Moore, Edw. J., Philadelphia.
Ford, W. J., Philadelphia.
Graybill, J. W., Philadelphia.
Fisher, H. P., Philadelphia.
Hurst, A. F. C., Philadelphia.
McConnell, Guthrie, Philadelphia.
Van Gorkom, F. C., Philadelphia.
Barnard, E. F., Philadelphia.
Wallis, J. E., Philadelphia.
Kaiser, Elmer E., Philadelphia.
Slauson, Justus, Philadelphia.
Cameron, G. A., Philadelphia.
Thomas, W. H., Philadelphia.
Gaston, H. D., Philadelphia.
Large, Octavus F., Philadelphia.
McCollin, S. M., Philadelphia.
Target, J. D., Philadelphia.
Borsch, J. L., Philadelphia.
Wanner, C. P., Philadelphia.
Stryker, S. S., Philadelphia.
Jacobs, Francis B., Philadelphia.
Craig, Frank A., Philadelphia.
Small, J. H., Philadelphia.
Marsh, J. F., Washington.
Trainer, R. F., Williamsport.
Shaw, C. B., Williamsport.
McElmoyle, C. L., McKees Rocks.
Hebert, J. W., Temple.
Calfee, H. L., Beaver.
Miller, C. D., Pottsville.
Neely, Frank, Allegheny.
Hirsch, Leon, Allegheny.
Kissel, R. L., Scranton.
Magill, A. C., Pittsburg.
Gault, O. C., Pittsburg.
Sedel, Aug., Pittsburg.
Wenger, Ed. Roy J., Reading.
Geagley, Lemuel H., New Castle.
Walter, R. L., Jr., Carnegie.
Walker, W. F., South Bethlehem.
Festa, A. R., Sellersville.
Cattersall, A. D., Berwick.
McLaughry, Ellis, New Castle.
Leaman, W. J., Leaman Place.
Glarth, D. I., Ford City.
Miller, Ella K., Ridley Park.
Ward, Bryant L., Starrucca.
Hunter, Jos. W., Charleroi.
McCain, Alex. M., Irwin.
McDonald, Geo. F., Gallitzin.
Day, Geo. E., Strasburg.
Atkinson, E. F., Connellsville.
Dougherty, M. H., Mechanicsburg.
Kohler, John B., New Holland.
Bradford, C. L., Austin.
Murphy, Felix A., Doylestown.
Bowman, Henry C., Mahanoy City.
Glenn, Jos. H., South Fork.
Lichtner, Harry O., Marysville.
Miller, Saml. W., Lancaster.
Neely, H. J., Butler.
Kurtz, C. S., Malvern.
Pensoldt, F. R., Williamsburg.
Pritchard, Lilly G. H., Canonsburg.
Steans, J. C., Millinsburg.
Alexander, W. H., Canonsburg.
Osborn, W. W., Upper Middletown.

RHODE ISLAND.

O'Meara, John G., Providence.
Maury, J. E., Providence.
Terry, Herbert, Providence.

SOUTH CAROLINA.

Brailsford, A. M., Jr., Mullins.
Griffith, Lewis A., Columbia.

SOUTH DAKOTA.

Stewart, F. H., Kimball.
Peterman, A. L., Parker.
Lawless, Mrs. Teresa.
Campbell, S. F., Watertown.

TENNESSEE.

Wood, F. L., Chattanooga.
Richards, A. F., Sparta.
Crawford, J. F., Nashville.
Van Horne, J. A., Memphis.
Boyer, J. F., Union City.
Woodard, H., Ashwood.
Dulaney, O., Newborn.
Roberts, W. F., Troy.
Abernathy, T. R., Chattanooga.
Padgett, Hazel, Columbia.

TEXAS.

Foote, S. A., Matagorda.
Matlock, John W., Frost.
Pennell, John S., Tyler.
Davis, W. H., San Antonio.
Emery, S. J., Navasota.
Motley, John G., Overton.
Montgomery, A. L., Tyler.
Bristow, W. A., Dennison.
Wright, Jas. G., Big Springs.
Allison, W. L., San Antonio.

VERMONT.

Wilder, H. L., Burlington.

VIRGINIA.

Sims, George E., Richmond.
Stoops, R. E., Norfolk.
Smith, George T., Norfolk.
McCutchan, R. B., Clifton Forge.

WASHINGTON.

Hawley, G. W., Seattle.
Holmes, S. J., Seattle.
Ames, J. W., Seattle.
Pease, G. T., Spokane.
Rhodehamel, H. E., Spokane.
McLeish, A. H., Ft. Steilacoom.

WEST VIRGINIA.

Copeland, Chas. B., Charleston.
Holland, C. L., Fairmont.

WISCONSIN.

Schofield, H. B., Greenwood.
McMahon, J. P., Union Grove.
Hanson, Chas. G., Neenah.

Society Proceedings.

COMING MEETINGS.

Wisconsin State Medical Society, Milwaukee, June 22.
American Ophthalmological Society, Atlantic City, July 13.
Washington State Medical Association, Seattle, July 13-15.

AMERICAN ACADEMY OF MEDICINE.

Twenty-ninth Annual Meeting, held in Atlantic City, N. J., June 4, 5 and 6, 1904.

The President, Dr. John B. Roberts, Philadelphia, in the Chair.

Report of Council.

One recommendation of the report was that societies with a sociologic trend be invited to send delegates to the meetings of the Academy, and to take part in the scientific business. It was further suggested that a committee be appointed to prepare a list of colleges whose degrees are acceptable to the Academy. The report was adopted as a whole, and the President appointed the following committee: Drs. Winfield S. Hall, Chicago; Donly C. Hawley, Burlington, Vt.; W. Jarvis Barlow, Los Angeles, Cal.; Charles McIntire, Easton, Pa., and Charles L. Van Pelt, Toledo, Ohio.

National Bureau of Medicines and Foods.

The Secretary read the report of council on the paper of Dr.

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H. Bert Ellis, Los Angeles, on "Necessity for a National Bureau of Medicines and Foods," which had been read at the last meeting. It was recommended that further thought be given to the plan, hoping that a thoroughly practical scheme could be worked out, and that in the meantime the Academy take no action. A short discussion favorable to the subject followed, by Drs. Ellis, Leartus Connor, Dr. Philip Mills Jones, secretary Joint Committee of Medicines and Foods, American Medical Association and American Pharmaceutical Association. On motion the report was adopted.

Medical Licensure.

DR. CHARLES MCINTYRE, secretary, gave in part the results of state examinations for medical licensure, for 1903. The results from 26 states showed that 2,478 licenses had been issued, and that 445 applicants had been refused, making a total of 2,923 applicants.

Relations of Dentistry and Medicine.

DR. EDWARD C. KIRK, dean of the Department of Dentistry, University of Pennsylvania, said that dentistry is essentially a department of the healing art, and includes the treatment of all pathologic conditions of the teeth and their associated parts, as well as that class of restorative procedures known as dental prothesis or mechanical dentistry. The problems of dentistry in pathology and therapeutics, are the same in principle as those which confront the medical practitioner. For this reason the sciences fundamental to medicine are fundamental to dentistry. The author pointed out that the relations of dental and oral diseases to bodily health should command the serious consideration of the medical practitioner, and that the oral manifestations of systemic disease should be recognized by the practitioner of dentistry. It seemed to him infinitely important that there should be a general recognition of the need for a closer interrelationship between medicine and dentistry, based on their possibilities for mutual helpfulness.

Relation of Physicians to Dentists.

DR. JOHN S. MARSHALL, U. S. Army, in a paper read by Dr. Alexander R. Craig, considered the subject from the professional and ethical standpoints. He quoted definitions of physician, medicine, surgery, dentist and dentistry. Exception was taken to the definition of dentistry and the following offered: "That department of medicine and surgery which relates to the study of the diseases, injuries and irregularities of the teeth, their treatment and preservation, the replacing of lost teeth by artificial substitutes, and the treatment of the diseases, injuries and deformities of the oral cavity, the jaws and the accessory sinuses." The education of the dentist is comparable to that of the physician, and the dental surgeon may be classed as a specialist in medicine. From the ethical standpoint the same claim holds for the true dentist.

Ethical Pharmacy.

DR. A. L. BENEDICT, Buffalo, described the present type of drug store, with its varied assortment of merchandise and methods of advertising ready-made remedies. He said it was usually a telephone station, a branch post-office, express office, a place to pay gas bills, circulating library and laundry. These conditions are endured by the physician because they seem impossible of correction. The druggist is not always able to execute his own wishes, because the store must be popular with the public. For the solution of the problem it is suggested that a man be found who is willing to limit himself to prescription work, and that he be given the patronage of a sufficient number of physicians to support his venture. It is obvious that this would diminish the number of pharmacists in any community, as they all would not be able to earn a living on the profits of prescriptions alone.

Protest Against Proprietary Products.

DR. A. MANSFIELD HOLMES, Denver, considered this subject in the light of "Mysticism vs. Rational Therapeutics." He referred to the methods employed by unscrupulous manufacturers of proprietary products. Other questions treated were whether the manufacture and sale of nostrums should be under legislative control, and to what extent it should be carried should a national bureau of medicines and foods be established. If so, how such a bureau should be selected and with what authority it should be invested. The relation of the nostrum syndicate to the public was mentioned and inquiries made as to the protection of so-called "private formulæ." He believes that steps should be taken to encourage original research and to reward brilliant discoveries in medicine and therapeutics. He also believed that the government should protect its citizens by legislating against the manufacture and sale of worthless and dangerous secret nostrums. He suggested that the academy should formulate practical plans to aid in bringing about the establishment of a national bureau of medicines and foods.

Synonyms in the New Pharmacopeia.

DR. JOSEPH P. REMINGTON, chairman of the committee of Revision, Philadelphia, discussed the effects of synonyms on the practice of medicine, and the relation of the pharmacist to physicians and to the public. He considered it desirable to drop these unscientific common names, because of the difficulty of compelling druggists to make and sell preparations of the standard strength. He shows that in those states where there are laws compelling adherence to the U. S. P., the use of synonyms affords loopholes for dishonest druggists. In conclusion, he called the attention of physicians to the importance of carefully noting changes in official nomenclatures, and the necessity for greater care in the use of official titles in writing prescriptions.

Science and Shekels.

DR. CHARLES MCINTYRE, Easton, Pa., stated that the contest between shekels and science is one of the great stumbling-blocks in the way of the proper relation between pharmacist and physician. The physician is not unlike the rest of humanity in not wishing to confess ignorance on subjects he is reputed to know, therefore in straits he will try medicines of unknown composition, because of their reputed value. One way of bettering this condition is suggested by putting the responsibility of the character of the preparation on the druggist who, as a rule, when put on honor can be trusted.

DISCUSSION.

DR. WILLIAM R. WHITE, Providence, R. I., opened the discussion on these papers. He cited a suggestive case in which apparently a life had been sacrificed, because the oral condition had not been recognized sufficiently early, and expressed the belief that the medical profession could not too promptly make a point of being more accurate in differentiating troubles which may possibly originate in the mouth and call in the scientific dentist for his diagnostic ability and technical skill.

DR. EUGENE S. TALBOT, Chicago, said that the dentist of the future must be as well grounded in the fundamental principles of medicine as other specialists, which should be taught in a regular medical college with medical students. The general welfare of a patient is based on a healthy mouth. He doubted the possibility of a successful operation along the alimentary tract with pus germs circulating throughout the canal from diseased gums. He believes that medical colleges should have a chair of stomatology, where 16 to 20 lectures should be given on the pathology and treatment, including hygiene, of the mouth and teeth.

DR. L. DUNCAN BULKLEY, New York, said that dentists should be made acquainted with those lesions in the mouth due to syphilis. Interstitial gingivitis could sometimes be cured by judicious internal treatment.

DR. HENRY O. MARCY, Boston, suggested that for the relief and cure of disease there should be a consolidation of the knowledge of dentists and physicians.

DR. S. A. KNOPF, New York, felt that the word "interdependence" covered the relationship between medicine and dentistry. He believed that some mixed infections in pulmonary tuberculosis could be traced to decayed teeth. He quoted a list of much-advertised remedies which analysis had shown to

contain from 20 to 40 per cent. of alcohol. Lawyers and ministers, without due consideration, willingly signed their names commending these products. He felt it quite within the province of the Academy to send out a warning to these gentlemen to stop prescribing medicines.

President's Address.

DR. JOHN B. ROBERTS, in his address on "The Doctor's Duty to the State," called attention to the need of honesty in the profession, both in professional matters and in civic duties. He pointed out the fact that the special training of physicians to know the needs of the community gave them unusual personal influence, and therefore increased their responsibility to the state. A physician should not be satisfied with simply treating the sick, but should endeavor to insist on the correction of hygienic evils in the community in order to prevent ill health. Attention was called to the political corruption so prevalent at the present time, and illustrations were given of the widespread inertia among business men in regard to fighting political evils. The growing distrust, even of judges, was mentioned, and the profession was urged to take an active part in political duties. Medical men should insist on mental hygiene as of equal importance with physical hygiene in the maintenance of the health and happiness of the individual. The dishonesty to the patient due to doctors prescribing secret remedies was referred to, and quotations given to show how largely the vaunted secret remedies are made up of alcohol and coal-tar preparations. The profession was urged to make vigorous efforts to discourage the use of remedies of which the active ingredients were unknown to the prescriber.

Teaching of Hygiene in Public Schools.

DR. HELEN C. PUTNAM, Providence, R. I., gave an analysis of the laws of the various states.

Medical Inspection in Public Schools.

DR. EDWARD JACKSON, Denver, said that school hygiene must include attention to actual disease within the schools and provision for its treatment; the immediate suppression of epidemics; the recognition of all physical defects among the pupils, with steps to secure their correction; maintenance of the best sanitary conditions throughout the whole school environment of the child, the training by verbal instruction, exercises and habitual practice of general and individual hygiene, and inspiring in every scholar the same reverence for health that we seek to instil with regard to patriotism or moral obligation. Defects of sight and hearing should be systematically sought for once a year among all pupils. Medical inspection of schools will be best done by a distinct class of practitioners who devote their whole time to this and similar work.

DISCUSSION.

DR. JAMES T. SEARCY, Tuscaloosa, Ala., spoke of his particular interest in the growth of the text-books in their reference to the effects of alcohol and anodynes on the human system. He felt that the principal thing to be emphasized was the effects on the brain.

DR. DE LANCEY ROCHESTER, Buffalo, thought it better that physiology should be dropped out of the public schools rather than have the poor attempt at teaching it which prevails at present. The difficulty lies in the fact that the teacher has not sufficient time or equipment for the proper teaching of this branch.

DR. HENRY O. MARCY, Boston, believed that the text-books used to-day a great deal better than those of ten years ago.

DR. WINFIELD S. HALL, Chicago, suggested that the Academy ask the publishing houses to bring the series of text-books up to the latest scientific and pedagogical light on the subject; and, also ask the normal schools to prepare men and women to teach physiology. The suggestion was referred to the council for action.

Are Modern School Methods in Keeping with Physiologic Knowledge?

The symposium on this subject was opened by Dr. A. Lapthorn Smith, Montreal, whose paper was entitled: "Is the Present Method of Educating Girls Consistent with Their Physiologic Development, and Is It for the Welfare of the Race?"

Dr. Smith admitted that every child should receive an elementary education, which should be the same for boys and girls, provided that it be given in such a manner as not to interfere with their physical development. As all higher education entails more or less loss of bodily health, he advocated less higher education, more manual training; simpler methods of living; earlier marriages and more children. Higher education may be justifiable in the case of men, if it the better enables them to earn a living and to support a wife and family. As the manifest destiny of women is to become happy wives and mothers and homemakers, any education which renders these duties or privileges distasteful, or physically impossible is unjustifiable. Higher education does render wifehood and motherhood distasteful, difficult and even impossible. In conclusion he stated that his remarks did not apply with the greatest force to the greater colleges, such as Bryn Mawr and Vassar and to the universities where so much attention was paid to the physiological development of girls, but to the high schools in which girls were competing as teachers and among whom the mental strain was making physical wrecks.

Is Equal Treatment of the Sexes Best, or Do Girls Require the Same Treatment as Boys?

DR. STEPHEN H. WEEKS, Portland, in his paper, which was read by the secretary, said that education in its most extended signification is the art of developing the various physical, intellectual, esthetic and moral faculties. There is a radical difference, both psychical and physical, between the sexes, which training can not remove. On the subject of higher training the following questions are suggested: Shall a girl receive a college education? Shall she receive the same kind of a college education as a boy? Shall she be educated in the same college? In answer to the first query depends on the character of the girl, precisely as with the boy. The needs of our time are for the best that can be given. If the question asked under the second heading means an equal breadth and thoroughness, the answer is yes; if precisely the same course, no. Answering the third question President Hyde is quoted with approval that "coeducation is worst, coördinate education is better, and separate education is best" for the woman. The young woman should not be led to indulge in the more strenuous forms of physical culture. Our real interests lie in better and more noble training of our young people; in making our young men more manly; our young women more womanly; our land more godly.

Gynecologic Aspect of Mental Overstrain at Puberty and Its Influence on Development.

DR. WILLIAM E. DARNALL, Atlantic City, said that along with the school strain there are usually other causes aiding the school breakdown, such as improperly regulated home life, unwise parental guidance, improper diet, etc The girl should have special care in her education at puberty. This forced education at this period leads to flabby muscles, poorly developed lungs, weak heart, etc. Watchful study of the girl and regulation of her life as her necessities demand, are suggested as preventive means. Not until teachers and parents remember that health is more important than knowledge; not until schools realize the futility of the forcing process of education and guard the health of their girls by diminishing rather than increasing the work of the pubescent period; not until they appreciate more fully that a sound mind depends on a sound body, can we hope to diminish the pitiable array of suffering neurotics and sexual incompetents who so largely constitute the womanhood of the land and who are to be mothers of the men of our country.

Effect of Modern School Methods on the Health of the Teacher.

DR. JANE L. GREELY, Jamestown, N. Y., said that the "dead line" of modern teachers is reached too soon. The causes of rapid wear may be the essential nature of the work, the range

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of the subjects covered, the increase of miscellaneous duties, and the pressure of inflexible standards. Possible remedies suggested are slower preparation, relatively greater emphasis on essentials, fewer pupils and better pay. The physician should urge the importance of relaxed tension, personal hygiene, the proper use of a vacation. The present normal course emphasizes as the chief aim of teaching the development of the child's mind rather than the imparting facts, yet it is doubtful whether the average teacher understands how to let a mind grow and consequently how to relieve her own of a considerable element of tension. The teacher should have more training in the philosophy of patience, should comprehend the personality of the instructor and the poise and temper of his mind have more vital bearing on the welfare of his pupil than the eager storing up of facts. If the training of teachers brought about a certain depth of philosophy in place of a part of their enthusiasm for results, it would add years to the endurance of their nervous system and a world of benefit to their students.

DISCUSSION.

DR. WINFIELD S. HALL, Chicago, believed that Dr. Grosly had struck the keynote to modern pedagogy and to those changes which modern school methods must undergo. He wished that her paper might be given the widest possible circulation.

DR. THOMAS D. DAVIS, Pittsburg, felt that a serious difficulty lay in the fact that the teacher was expected to bring the scholars of varying degrees of intellect up to the same level of proficiency in their studies. Another difficulty was that parents load their children down with so many studies outside of those of the school room, and with social engagements.

DR. LEARTUS CONNOR, Detroit, believed that a great fault lay in the fact physical labor is too often considered a degradation and that too much emphasis is placed on the professions as the vocations of choice.

DR. VICTOR C. VAUGHAN, Ann Arbor, said while there was much at fault in our system of public education, there was in it much of good. It seemed to him that one of the commonest things in the American universities was the dignity of labor; the men who worked in the shops were just as respectable as those taking classical courses. In his experience in the Spanish-American war he was much pleased when told that the men digging the trenches were largely Harvard and Princeton men. He did not believe that higher education, properly conducted, hurts girls at all.

DR. JAMES H. MCBRIDE, Pasadena, Cal., believed that if teachers would be a little broader in their aspirations for general education, becoming well rounded out intellectually, there would be a great decrease in nervous breakdowns among them.

The Correspondence Treatment of Disease.

DR. FREDRICK T. ROGERS, Providence, R. I., spoke of this method as a form of charlatanism, the natural outgrowth of the so-called correspondence schools and the lavish advertising of nostrums in the daily press. A description was given of the methods employed and an explanation given of how apparently fair propositions contain a saving clause in the interest of the advertiser. The results of some personal investigations were given. The remedy was suggested of giving great publicity to the plan, of indicating to patients the foolishness of such claims, of publicly denouncing the methods employed, criticizing the editor who plays a part in the shameful procedure, and by word, pen and example attacking at every opportunity those who by such false pretenses and absurd promises are a menace to the public welfare.

How May the Public School Be Helpful in the Prevention of Tuberculosis?

DR. S. A. KNOPF, New York City, considered the duties of the school board concerning the location, construction and equipment of the modern school house with a view to prevent the development and the spread of tuberculosis among school children. He referred to the duties of the superintendents in the arrangement of the curriculum so that the physical development is not neglected nor the intellectual faculties overtaxed. The method in which the school teacher should impart knowledge of the cause, prevention, and even cure of tuberculosis to the children was outlined, together with the duties of the school physician in regard to the prevention of tuberculosis among the children. The public school should become a great and beneficent factor in the combat against tuberculosis as a disease of the masses. He suggested the possibility of providing the children of the poor with a luncheon of a few meat sandwiches and one or two glasses of good milk. To prevent a pauperizing tendency a few pennies might be charged for these lunches. This practice, the author said, was in vogue in Boston, in Rochester and in other cities.

THE CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, held May 24, 1904.

The President, Dr. Thomas W. Huntington, in the chair.

Action of the Saline Cathartics.

DR. J. B. MACCALLUM described the experimental studies which he had made along these lines. The old theory of Liebig, that the saline cathartic act by raising the osmotic pressure of the intestinal contents, has been disproved, and the more modern theory of Schmiedeberg, that they act by preventing the absorption of fluid from the intestines, has also but little in its favor. The purgative salts will produce catharsis when introduced intravenously in animals. Indeed they act more energetically and more quickly than if they are introduced into the stomach or intestines. Not only is peristalsis increased, but the secretion of fluid into the intestines is directly stimulated. Similar effects may be produced on a loop of intestine by painting the peritoneal surface with a cathartic solution. The salts which produce these effects are mostly calcium precipitants, such as the sulphates, oxalates, etc. The citrates do not precipitate calcium, but render it inactive in some other way. For this reason they prevent the coagulation of blood. The effects of all these salts may be neutralized by infusions of calcium chlorid. The powerful cathartic action of barium chlorid apparently does not depend on any relationship to calcium, and its action, though diminished by calcium salts, can not be entirely inhibited thereby. The same salts which act as cathartics also act as diuretics, and their action is diminished or inhibited by infusions of calcium chlorid. Even the normal flow of urine may be lessened by such an infusion. Infusions of sodium chlorid solution not only act as diuretics, but also increase the secretion of fluid into the intestines. Large infusions may cause glycosuria and correspondingly may produce an excretion of sugar into the intestines. A lack of calcium seems to increase the activity of the tissues, and an excess seems to diminish the activity, whereas sodium salts produce an opposite effect. A solution of cascara sagrada, rendered neutral or slightly alkaline by sodium carbonate, will act as a cathartic if injected intravenously. A number of practical therapeutic suggestions follow from this work. Intravenous or subcutaneous injections of cathartics may be useful in certain cases. Calcium salts may prove of value in nervous diarrhea or polyuria. The addition of calcium salts to enemata may assist in their retention.

DR. J. M. MOSS said that it was strange that barium and calcium, which are in the same class chemically, should produce such opposite results.

DR. C. QUINAN considered barium a powerful heart poison and believed that this might in some way account for its apparent antagonism to calcium. He had tried calcium chlorid on a case of chronic diarrhea without any marked results.

DR. MACCALLUM in closing the discussion said that magnesium chlorid and strontium chlorid both act in a similar manner to calcium chlorid, but for some unknown reason, barium chlorid has an entirely different physiologic action. The latter has been recommended as a heart stimulant. In large doses it is very poisonous, although this toxicity is lessened by combining it with sodium chlorid. The author's father has used calcium chlorid in doses of ten grains, four

times a day in eight cases of diarrhea in an insane asylum with some benefit.

Report of a Case of Hip-Joint Disease Treated by Early Operation.

DR. T. W. HUNTINGTON stated that, under the present method of treating hip-joint disease, the results are often most disappointing. In a very large percentage of the cases, the best that can be hoped for or promised is permanent impairment of the joint, shortening of the limb, and faulty locomotion. The present knowledge of the pathology of the disease points definitely to a primary osseous focus in more than 90 per cent. of the cases. The seat of this osseous focus occurs usually in the head of the femur. The determination of the exact location of the focus is not always within the range of possibilities, but with the perfection of *x*-ray technic, ultimately much may be accomplished so far as early diagnosis is concerned. If there be any reasonable hope of a true cure for hip-joint disease, it must depend on a bold attack on the disease in its incipiency, before the synovial cavity has been invaded. Such an attack must be instituted through a channel remote from the joint capsule, and must be so planned that it will afford relief of tension, and admit of complete removal of infected tissues. The following case illustrates the proposed plan of attack.

The patient, a delicate boy of 16 years, came under observation five weeks after he had begun to complain of pain and tenderness in the right hip. The pain has gradually increased, he has had fever, and has lost twenty pounds. He now lies with the right thigh well flexed and there is marked tenderness over the great trochanter. Believing that the main trouble lay in the head of the femur, an immediate operation was decided on. The great trochanter was uncovered by a vertical incision three inches long, and after carefully reflecting the periosteum, a window was chiseled out, 2½ cm. long by 1½ cm. wide. Through this a bone curette easily penetrated the neck of the femur, and a well-defined cavity in the head of the bone was emptied of thick, yellow, purulent fluid. The bone was then curetted and treated with pure carbolic acid and 95 per cent. alcohol. The calcined bone packing of the wound broke down, but otherwise the convalescence was uneventful. In six weeks the wound was entirely closed, and the patient left for home at the end of two months, having gained eight and a half pounds. He now walks with a cane without a limp and he has recovered nearly all his lost weight.

DISCUSSION.

DR. D. TAIT: We should not change our treatment of hip-joint disease on the history of a single case and especially when there is no convincing evidence that the case was really one of tuberculosis. The history sounds more like a case of osteomyelitis. The transtrochanteric route is not a new one for reaching the hip.

DR. S. J. HUNKIN: The case reported certainly sounds more like one of osteomyelitis than tuberculosis, and we can not draw any analogy between tuberculosis and infections with the pyogenic organisms. Dr. Sherman performed a somewhat similar operation to the one here advocated in 1894 before the American Medical Association and the patient is still under treatment with an abscess. He showed 7 skiagraphs of hips mostly taken 5 to 6 weeks after the onset of symptoms, and in not one of them can a definite focus be made out. The joint looks simply somewhat blurred. Where would be the focus to attack? Furthermore the injury to the epiphysial line might result in very serious shortening of the leg. In operations on tuberculous ankle-joint disease he had found that even where the *x*-ray showed no joint involvement, there was yet granulation tissue, presumably tuberculous, present in the joint.

DR. E. RIXFORD: As a matter of fact, we can rarely make a diagnosis of a limited focus in the head of the femur, and then remove it without infecting the joint. In the operation advocated by Dr. Huntington, the operator is working in a deep hole and it is doubtful if he can effectually remove all the diseased tissues, and make out the precise extent of the disease.

DR. OPHULS: The granulation tissue of tubercular joints can be shown in most cases to contain tubercles, although it is more difficult to demonstrate the bacilli. For this a large number of serial sections is often necessary. In old, nearly healed cases, no tubercles may be found.

DR. HUNTINGTON, in closing, said that it must be admitted that the evidence that the present case was of tubercular origin is not conclusive. The microscopic examination of the pus was negative and no inoculations were made. The case operated on by Dr. Sherman was not similar to the one here described, and indeed, just such treatment has rarely been attempted and little is known about it. The danger to the epiphysial cartilage is certainly present if no operation is performed, for it may be destroyed in the course of the disease. The periosteum can supply nutrition to the bone. Tubercular knees and ankles do not fall within the scope of the present paper.

DR. HUNKIN: There is no relation between the removal of the epiphysis by operation and its destruction by disease. In the latter case, for some unknown reason, the bone may retain its nutrition and may even grow excessively.

CLEVELAND ACADEMY OF MEDICINE.

Sixteenth Regular Meeting of the Clinical and Pathologic Section, held May 6, 1904.

Dr. Carl A. Hamann in the Chair.

Acute Dilatation of the Stomach Complicating an Abdominal Section.

DR. HUNTER ROBB read a paper on this subject, and reported a case in which dilatation of the cervix and curettement of the uterus was performed and immediately followed by an abdominal section to remove an adherent appendix, resect a cystic ovary and suspend the uterus. On opening the abdominal cavity a large tumor presented which reached to the symphysis and proved to be the dilated stomach. The stomach tube was passed, a considerable amount of gas and some fluid escaped, and the organ at once returned to its normal size. The day after the operation the stomach became moderately distended, and the condition was again relieved by the stomach tube. From this time no further trouble was experienced.

DR. SAWYER drew attention to the fact that the stomach was markedly under the control of the nervous system, and that dilatation may occur with startling suddenness. He mentioned a case of acute dilatation during typhoid fever following the swallowing of some beefsteak. The condition is often accompanied by shock, and some cases of shock during operation may be caused by this.

DR. HAMANN had seen reports of numerous cases, usually in abdominal operations, but also after others, such as renal operations; it may also cause a fatal result in infants.

Hydatidiform Disease.

A report of a case of this disease prepared by Dr. John B. McGee was read by the Secretary, in Dr. McGee's absence. According to Palmer Findley, only 210 cases of this disease had been recorded up to March, 1903. Nothing definite is known of its immediate or remote causes, nor is the question of its origin, whether fetal or maternal, fully settled. The mortality is about 25 per cent., and the disease usually occurs near the end of the childbearing period. About 16 per cent. become malignant. This patient, aged 37, had had 8 living children and no miscarriages. Two months after the cessation of menstruation due to this last pregnancy, she began to flow, and this continued irregularly and in small amount for four months, when it became profuse, and the uterus was emptied. At this time the uterus was as large as at term, but it was more smooth and rounded than usual and no fetal parts could be felt. The os was patulous, but there were no pains. As tamponade did not control the hemorrhage, the os was dilated and some of the vesicles removed, clearing up the diagnosis. The uterus was emptied and packed with iodoform gauze. No fetus could be discovered. The convalescence was uneventful. The following month menstruation appeared, and was regular until seven months ago, when the patient again became pregnant. The present gestation seems to be progressing normally.

Radium Cure of Lupus.

DR. MYRON METZENBAUM presented a case of lupus healed by the aid of radium. This patient had been treated for some time with the Roentgen rays, at first with marked improve-

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ment, but later this treatment seemed to lose its efficiency, and radium was tried with marked improvement. After 21 days the surface was entirely healed, although Dr. Metzenbaum said the permanency of the cure was of course not certain, and many months must elapse before the case can be considered healed. Drs. Corlett, Leuke and Birge discussed the paper.

AMERICAN ACADEMY OF RAILWAY SURGEONS.

Joint Meeting of the International Association of Railway Surgeons and the American Academy of Railway Surgeons, held in Chicago, June 1, 2 and 3, 1904.

During the first day the sessions were presided over by Dr. James H. Ford, Indianapolis, president of the International Association of Railway Surgeons, and the sessions of the second and third days by Dr. Samuel C. Plummer, Chicago, president of the American Academy of Railway Surgeons.

Welcome.

An address of welcome was delivered by Dr. William A. Evans, Chicago, which was responded to by Dr. George Ross, Richmond, Va.

Presidential Addresses.

President Ford discussed the "Use and Abuse of the Railway Surgeon" in his presidential address; and President Plummer selected as the subject of his address, "Following and Assisting Nature."

Merger and New Organization.

The following resolutions were introduced and adopted:

Resolved, That at the close of the present session the International Association of Railway Surgeons dissolve its present organization for the purpose of organizing the American Association of Railway Surgeons, provided, that a union be made with the American Academy of Railway Surgeons at the meeting set for that purpose.

Resolved, Further, That the Executive Board of this Association be authorized to join with the Executive Board of the American Academy of Railway Surgeons and organize the American Association of Railway Surgeons.

Temporary Organization.

The two associations having dissolved, Dr. David S. Fairchild, Des Moines, was elected temporary chairman, Dr. Louis J. Mitchell, Chicago, temporary secretary.

Constitution and By-Laws.

DR. ALBERT I. BOUFFLEUR, Chicago, presented the report of a joint committee on constitution and by-laws for governing the new organization, which was accepted and adopted.

Election of Officers.

The following are the officers of the consolidated organization—the American Academy of Railway Surgeons: President, Dr. John E. Owens, Chicago; vice-presidents, Drs. Richard W. Corwin, Pueblo, Colo., George D. Ladd, Milwaukee, Wis., and Henry C. Fairbrother, East St. Louis, Ill.; treasurer, Dr. Thomas B. Lacey, Council Bluffs, Iowa; secretary, Dr. Henry B. Jennings, Council Bluffs, Iowa; editor, Dr. Louis J. Mitchell, Chicago; executive board: Drs. David S. Fairchild, Des Moines, Iowa, and Albert I. Bouffleur, Chicago, three-year term; Drs. Samuel C. Plummer, Chicago, and Arthur L. Wright, Carroll, Iowa, two-year term; and Drs. William S. Hoy, Wellston, Ohio, and Joseph R. Hollowbush, Rock Island, Ill., one-year term.

Miscellany.

IMPROVED MEDICAL JURISPRUDENCE.

A Forward Movement in the Treatment of Certain Cases—A Case in Point.

BY DR. D. R. BROWER, CHICAGO.

Michael Curran, after several days of excessive indulgence in alcoholic stimulants, was found to be insane by the physician called to see him. Under the impression that it might be a case of acute alcoholism, he was placed in the Washingtonian Home for treatment. Here it soon became manifest that it was something more, and Dr. Archibald Church was called in consultation, and made the diagnosis of general paresis.

The patient was then tried by the court, adjudged insane, and last January was sent to the Lake Geneva Sanitarium. There he rapidly improved, the alcoholic effects disappeared, and his general health became better under vigorous alterative treatment, so that his friends supposed him well. At the suggestion of these friends, and with the approval of his brother, Thomas Curran, the conservator, I was then sent to the sanitarium to determine the mental condition of the patient. It did not require a prolonged interview to make a diagnosis of general paresis, all the classical signs of the disease being present, and a report was made accordingly. The report did not satisfy these friends, and they instituted habeas corpus proceedings in the Circuit Court of Cook County, Judge Lockwood Honore presiding. The medical experts, Drs. Church, Stearns, Buford and myself, suggested that the court call to his assistance three physicians skilled in mental and nervous diseases to sit with him as amicus curiæ in the trial; that two of them be selected on the advice of his family physician, and these two to select a third. The court accepted the suggestion. The result was the trial of the case by a jury of three eminent specialists, Drs. Sanger Brown, Sidney Kuh and Hugh T. Patrick. This was a thoroughly dignified and scientific proceeding, one that I think should appeal to courts generally in similar cases. The opinion of the court follows:

State of Illinois, County of Cook, ss.: In the Circuit Court of Cook County.

In the matter of Michael Curran. Petition for writ of habeas corpus.

OPINION OF THE COURT.

THE COURT.—Before the hearing of this case was begun it was agreed between counsel on both sides that inasmuch as the question to be determined was largely a matter for expert opinion, the court might, at the expense of the parties, call to his assistance in arriving at a conclusion, three practitioners, eminent in their profession, as experts on the questions involved in this case; and it was further agreed between counsel representing the friends of Michael Curran, and counsel representing the respondent, that the opinion which should be rendered by said three experts should be conclusive in the case.

The court thereon requested the assistance of Dr. Sanger Brown, Dr. Sydney Kuh and Dr. Hugh T. Patrick.

These three gentlemen heard all of the evidence which was adduced on both sides, and at the conclusion thereof made a personal examination of the relator in his own apartments, lasting two hours, as a result of which they have handed to the court the following opinion:

"CHICAGO, May 11, 1904.

"TO THE HONORABLE LOCKWOOD HONORE, Judge of the Circuit Court.

"*Sir*:—Pursuant to your request, we have listened to all of the evidence submitted in court in the case of Michael Curran, and have also carefully examined him as regards his physical and mental condition. The examination was made jointly in the absence of all other persons and occupied two hours. We now have the honor to submit the following unanimous opinion based on the evidence and on our personal investigation of the patient.

"In our opinion the said Michael Curran is now (and has for at least four months been) suffering from the disease called general paresis, paretic dementia and general paralysis of the insane. This is a form of mental failure due to organic changes in the brain and is incurable. Ordinarily the disease runs its course to a fatal termination within three years from the appearance of positive symptoms.

"We further believe that the said Michael Curran is not irresponsible for his acts, but is quite incapacitated for the ordinary care of his health, his safety and his business affairs. While general paresis is not one of the forms of insanity most dangerous to others, nevertheless a person with this disease is liable to sudden outbursts of passionate anger from trivial cause and in such state of passion is certainly dangerous.

"Therefore, we believe that the said Michael Curran should be in the care of a proper conservator, who may shield him and save him in every possible way from the disastrous effects of his disease.

"Considering that general paresis is frequently not recognised by the laity, even by intelligent friends in daily contact with the patient, until the disease has progressed to a most alarming extent or until some great disaster overwhelms the victim, we beg to respectfully add some specific details and general considerations bearing on the present condition of Michael Curran, and on the probabilities of his immediate future. And in this connection we beg to make the reminder that the daily task of the physician is not only to determine the present condition of the patient and prescribe the treatment, but equally, to look ahead and anticipate future events and provide for them. Knowing the nature of a tumor, he is able to say that it will never shorten the life of the patient or that it will soon lead to the end. Though no pain be present, he knows that pain will soon come. Fever may be slight and the skin clear. The doctor must know that in a few days the temperature will be high and the body covered with rash. This ability to anticipate applies to mental as to other diseases, though perhaps not with the same exactitude, and enables us to safeguard the patient for the future, even though he may show but slight abnormality at present.

"First, then, Michael Curran shows no just appreciation of the gravity of his symptoms and the seriousness of these legal proceedings. Though his life, his liberty and his property are all involved in this inquiry, he is happy, serene, inconsequential. He is absolutely untouched by the serious and repeated assertions of four

reputable physicians that he has an incurable disease. True, he wished his liberty, but the fact that he may for the rest of his natural life be sequestered in an institution for the insane really gives him no concern. When, in the course of our examination, he was unable to make change in the simplest sums, he was entirely undisturbed. When, after repeated corrections, he could not tell how much twenty-five cents and fifteen cents would add, and when with pencil and paper he could not figure out how much the half of $65 would be, he saw absolutely no significance in the failures. Be it remembered that these were computations of his daily life which he had done with ease and accuracy for many years.

"Furthermore, during the hearing and during our examination when talking about the testimony, he evinced no active interest in the statements of the witnesses, showed absolutely no concern regarding serious statements involving life, liberty and property, not only was he unable to understand the significance of much that was said, but was quite indifferent to what he did understand. His own conduct during the hearing may well be contrasted with that of his brothers and his friends, for all of whom the proceedings were naturally of infinitely less concern than for him.

"The testimony and our own examinations show clearly to us mental failure, both as regards memory, judgment and the general appreciation of his surroundings and of events concerning himself. Beginning with the matters which concerned him most frequently and with which he was naturally most familiar and mental operations which he had so often repeated that they must have become almost automatic, we may state that during our examination, when asked how much the bill would be for three drinks of whisky at 15 cents each, he said that there would be two for a quarter and 15 cents for the other, but repeatedly and after being told a number of times that his statement was incorrect, he asserted that the amount was 35 cents. During this computation he became so confused that he sometimes added 10 cents to the 25, sometimes 15, but continued to make the sum 25 cents. With pencil and paper he corrected the multiplied 15 cents by 3, the proper result, but the cost of 65 barrels of beer at 35 a barrel, but was unable to estimate his rebate, which was 50 cents a barrel. This he attempted to do with pencil and paper, but was absolutely unable to do it, saying first that it would be $130, and then $117.50, and then $50, and finally, after great effort and obvious confusion, did hit on the correct sum. When asked how much would remain if $2.35 were taken from $10 he was entirely unable to state the remainder, and then when he made the attempt with pencil and paper, made numerous errors and had to be corrected several times before arriving at the correct amount.

"In order to make these tests as fair and realistic as possible, we procured a lot of small change and made dummy purchases of him, as it were, over a bar. The first proposition was to pay a bill of $2.60, for which he handed a $10 bill. This brings a great difficulty and extreme slowness that he finally counted out change, which was wrong by 90 cents. When he was told that this was wrong and did it over again, he again made an error, but finally gave correct change. He was then asked to take $8.75 out of $10 and this time he gave the correct change, but it was only after the expenditure of a great amount of time, after counting and recounting and making numerous mistakes. There were other similar tests, but the foregoing are fair examples. These were all made after it was explained to Mr. Curran what their purpose was, and that it was to give him an opportunity to make good his assertion that he was amply able to make change and do all computations necessary for the transaction of his business. We also made the attempt to have him as much at ease as possible, asked him to take plenty of time, and it is fair to suppose that he was exercising his intellect to the utmost of his ability.

"We think it also worthy of remark that he had no recollection whatsoever that more than one physician was called on his side, who had examined him and testified in his behalf. He could recall really none of the essential features of any of the testimony, either for or against him, except in a general way that his friends thought he was all right and the others that there was something the matter with him.

"Furthermore, Mr. Curran showed lack of appreciation of the fact that he was in an abnormal condition about the time of Christmas of last year when he was sent to the Washingtonian Home, to the Detention Hospital, was adjudged insane and sent to Lake Geneva. Not only is he unwilling to admit that he was not all right at that time, but he is certainly sincere in his belief that he was at first only slightly under the influence of liquor, and that after the first day he was simply 'a little nervous.' The testimony of every witness who testified concerning his condition at that time, excepting that of Mrs. Morgan, was to the effect that there were then exceedingly obvious symptoms of mental disturbance. His mental disturbance at that time been simply the result of a spree, and were Mr. Curran at present normal, his view of his then condition would be decidedly different from what it is at present. He would recognize now that at that time he was in an abnormal condition.

"The physical examination, made with the patient completely stripped and which was thorough in every respect, revealed to us the ordinary classical and universally recognized signs of general paresis. The state of the pupils, the disorder of speech, the condition of the deep reflexes, the character of the tremor present, and the disturbance of co-ordination, made a group of symptoms which would be absolutely conclusive to anyone conversant with the disease.

"As stated in the beginning of this report, we are firmly convinced that should Mr. Curran be released and allowed to do as he pleases, to gratify his appetites, whims and desires without restraint, that he would not only hasten the course of his disease to a fatal termination, but would inevitably bring calamity of some sort to himself, not on others. With his exceeding confidence in himself and his powers, his ever-present feeling of good-fellowship and liberality, and with practically no power of self-restraint, even if he saw the necessity for it, he is sure to overindulge in alcohol and to be injured by other excesses. Judging by our experience with like cases, we believe that in the conduct of his business he would be not only extravagant but irrational, would very readily be induced to enter into calamitous contracts, because unable to appreciate the significance of such transactions. The danger of violence to others has already been noted, and while we believe such danger to be not very imminent, it is always to be reckoned with. The danger of suicide and of the commitment of a criminal act are also more than mere possibilities. We have all had examples in our own practice of patients with general paresis who, although apparently perfectly harmless and, indeed, more nearly normal than Mr. Curran, have suddenly and without warning committed suicide, made dangerous assaults on others, or committed some other criminal act.

"Consequently, we are firmly convinced that for the sake of his own health, comfort, welfare and safety, as well as for the protection and welfare of the public and the conservation of his property, he should remain in restraint. Our experience leads us to believe that it would be impracticable and injurious to Mr. Curran to allow him to be at large in the custody of an attendant. We also believe that travel with such attendant would be of no benefit to him and might result in great difficulties and serious harm.

(Signed) "SANGER BROWN,
"SYDNEY KUH,
"HUGH T. PATRICK."

In view of the foregoing, there seems to the court no other alternative than to follow the opinion and the recommendations above made.

The relator will, therefore, be remanded to the custody in which the writ found him. The petition will be dismissed and the writ quashed.

Book Notices.

THE INTERNATIONAL MEDICAL ANNUAL. A Year Book of Treatment and Practitioner's Index. 1904. Twenty-second Year. Cloth. Pp. 770. Price, $3.00 net. New York: E. B. Treat & Co.

This work is intended as a general epitome of the more striking advances in medicine during the year prior to its publication. That it has acceptably fulfilled this function is shown by the fact of its having entered on its twenty-first year. The articles and abstracts are made up by skilled collaborators of more than local reputation, and the general practitioner will find it a valuable résumé—one that will enable him to collect his views and recollections of the publications of the preceding year.

THE LYMPATHICS. General Anatomy of the Lymphatics, by G. Delamere. Special Study of the Lymphatics in Different Parts of the Body, by P. Poirier, Professeur d'Anatomie à la Faculté de Médecine à Paris, Chirurgien des Hôpitaux, and B. Cunéo, Professeur agrégé à la Faculté de Médecine de Paris. Authorized English Edition by Cecil H. Leaf, M.A., M.B. (Cantab.) F.R.C.S. (Eng.), Assistant Surgeon to the Cancer Hospital. With 117 Illustrations and Diagrams. Cloth. Pp. 301. Price, $5.00 net. Chicago: W. T. Keener & Co. 1903.

This work is divided into two parts; the first, of 110 pages, treats of the "General Anatomy of the Lymphatic System," and part two, of about 200 pages, is devoted to the "Special Study of the Lymphatics of the Body." In part one, the leucocyte in all its varieties and forms is very extensively and interestingly considered. The structure, the physical, chemical and biologic properties and the evolution (degeneration and death) of the leucocyte are studied in a most entertaining manner. The lymphatic vessels and glands are then described in the same careful way. A thorough knowledge of the location of the lymph glands and of the area tributary to each gland or group of glands is often of the greatest importance, not only to the surgeon in operating, but also to the diagnostician. These points are all well described and clearly illustrated in part two. An extensive and well selected bibliography follows each subject. The work is an excellent one, and shows an immense amount of careful, painstaking labor on the part of the authors. The translation is well done, and the profession is to be congratulated that it is able to obtain the work in English.

ATLAS AND EPITOME OF HUMAN HISTOLOGY AND MICROSCOPIC ANATOMY. By Dr. Johannes Sobotta, of the University of Würzburg, Bavaria. Edited, with additions, by G. Carl Huber, M.D., Junior Professor of Anatomy and Director of the Histologic Laboratory at the University of Michigan. Authorized Translation from the German. With 171 Illustrations on 80 Lithographic Plates, and 92 Text Illustrations. Cloth. Pp. 348. Price, $4.50 net. Philadelphia and London: W. B. Saunders & Co. 1903.

This little atlas is one of the most valuable for the medical student that has yet appeared. In the first place it deals distinctively with human tissues, and in the second place the plates are nearly all reproduced in the exact colors that are taken by tissues stained with hematoxylin and eosin. There is no question that it is of great assistance to a student to have the illustrations in his text in the same colors as are the sections he is studying under the microscope, and hematoxylin and eosin staining is the method in common use. The text, although necessarily brief, is excellently written and quite accurate, better, we think, than in many of the larger books that can not claim so much for their illustrations. There are a few unfortunate omissions, not all of which are necessitated

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by the brevity of the book. For example, the illustration of the pancreas shows none of the islands of Langerhans, a serious defect in a book to be used by medical men. Illustrations of the parathyroid glands, the hypophysis, and the hemolymph glands would have also been useful in the same instance. But the numerous and more important illustrations present are both accurate and pleasing to a high degree.

A TEXT-BOOK OF DISEASES OF WOMEN. By Thomas A. Ashby, M.D., Professor of Diseases of Women in the University of Maryland. With 233 Illustrations. Cloth. Pp. 661. Price, $4.50. Baltimore: Williams & Wilkins Co. 1903.

The author states that "In a concise and practical way he has tried to present all of the subjects embraced in a study of the diseases of women." After a brief historical sketch the anatomy and development of the parts are considered. Most of the illustrations in this connection are satisfactory, but Figure 5, representing the perineal body, grossly exaggerates that structure so as to give one an entirely erroneous idea concerning it. Figure 23, illustrating the nerves of the uterus, is taken from Bardeleben's Anatomy and shows a pregnant uterus, neither of which facts is mentioned. Chapters on methods of examination and technic are fair. The pathology throughout the work is not up to date, and no one would ever recognise tubercle bacilli from the illustration on page 218. The statements that the gonococcus "invariably finds its way into the vagina through impure sexual intercourse" and that "gonorrheal endometritis is seldom observed except among immoral women" are not in accord with the experience of other observers. At times the directions for treatment are very indefinite, for instance, on page 500, we find, "In old and long-standing cases of ectopic pregnancy where the child has been converted into a lithopedion or has become mummified, etc., the child should be left alone for nature to dispose of its remains or the surgeon should assist Nature in the effort at its elimination by such measures as will favor this result," but nothing whatever is said of what measures might favor such a result. The closing chapter is devoted to intestinal complications and methods of intestinal suture. As a whole, the work covers fairly well the subject of gynecology, but it can not be said to possess any qualities or marks of distinction.

Therapeutics.

[Our readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in everyday practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Acne.

In the treatment of acne of the face, the "blackheads" must first be expressed out by the small instrument used for the purpose. To soften the skin and aid the procedure the parts should be washed with water as hot as can be borne, medicated with an alkali, like sodium or potassium carbonate in 5 to 10 per cent. strength; sodium bicarbonate 5 per cent.; ammonium chlorid 5 to 20 per cent., or sodium borate 5 per cent.

If more energetic remedies are desired, soaps medicated with resorcin or naphthol are of service. A combination similar to the following is also valuable:

B. Sulphuris precip.	3iiss	10
Resorcini	gr. lxxv	5
Zinci oxidi	℥ss	15
Adipis lanæ	℥v	20
Liq. petrolati	℥i	30

M. Ft. unguentum. Sig.: Apply locally.

Similar combinations containing naphthol, salicylic acid or ichthyol may be used. The skin should be sterilized with alcoholic lotions containing mercuric bichlorid ½ to 2 per cent., or resorcin 5 to 15 per cent., to be applied at bedtime on cotton lightly soaked in the solution.

The following may be suggested for this purpose.

B. Resorcini	℥i	4
Aq. cologne	Oi	800

M. Sig.: Apply locally on cotton.

These solutions tend to prevent pustulation to some extent. At the same time constipation should be corrected, avoiding pastries and seasoned foods. In neurotic cases hydrotherapy is indicated.

In the pustular variety of acne, sulphur lotions are indicated, as in the following combination:

B. Sulphuris precip.	℥vi	24
Spts. camphoræ	℥ii	60
Aquæ rosæ	℥viss	200
Aq. destil.	℥vii	210

M. Sig.: Shake and apply at night with a brush and wash off with hot water the next morning.

If the pustules are not conspicuous, as on the neck or back, they may be painted with the tincture of iodin, which will in most cases arrest the inflammatory process. On the face a saturated solution of boric acid in alcohol may be used.

Internally the author recommends brewer's yeast in doses of one to two teaspoonfuls before each meal. Furunculous or phlegmonous acne sometimes requires surgical intervention with a fine scarifier.

Internally the vasoconstrictors are beneficial:

B. Ergotin		
Quin. hydrobrom., ää	gr. i	06
Ext. hamamelidis flu.	m. ii	12
Pulv. belladonnæ fol.	gr. 1/12	005

M. Ft. pilula No. i. Sig.: Four such pills daily after eating.

Pourdon, in *Dublin Jour. Med. Science*, recommends the following in the treatment of acne:

B. Cadini iodidi	gr. x	65
Adipis lanæ	℥i	30

M. Sig.: To be applied locally at night and well rubbed in and washed off the following morning with hot water and superfatted soap, accompanied by massage of all the affected skin.

Gastric Catarrh.

In cases of chronic gastritis, accompanied by pyrosis, the following is recommended in Yeo's *Clin. Ther.*:

B. Bismuthi subnit.	gr. lxxx	5
Morphinæ hydrochlor.	gr. 3/4	05
Sodii bicarb.	gr. xxx	2

M. Ft. chart. No. x. Sig.: One powder to be taken every two hours.

If there is loss of appetite the following:

B. Ext. gentianæ	gr. xxx	2
Syr. aurantii corticis	℥v	20
Aq. destil. q. s. ad	℥vi	180

M. Ft. mistura. Sig.: One tablespoonful before each meal; or:

B. Tinct. nucis vom.	m. xxx	2
Aq. laurocerasi	℥iiss	10
Tinct. quassiæ q. s. ad	℥i	30

M. Ft. mistura. Sig.: Fifteen drops to be taken, in water, three times a day.

For acute cases of gastric catarrh the following is recommended by the author:

B. Acidi carbol.	gr. ¼	015
Bismuthi subnit.	gr. x	65
Mucilaginis acaciæ	℥ss	2
Aq. menth. pip. q. s. ad	℥ii	8

M. Sig.: To be taken in a tablespoonful of water every one, two or three hours.

In acute attacks of gastritis in infants, accompanied by nausea and vomiting, the following is recommended:

B. Acidi tartarici	gr. xv	1
Aquæ laurocerasi	gtt. x-xx	.65-1.30
Aq. destil. q. s. ad	℥v	150

M. Ft. mistura. Sig.: One dessertspoonful every two hours.

If fever is present the following is recommended:

B. Acidi hydrochlor. dil.	m. v-x	.30-.65
Syr. simplicis	℥ii	8
Aquæ destil. q. s. ad	℥iii	90

M. Sig.: One dessertspoonful every two hours, in water. And if gastric irritability has disappeared but fever still remains, the following is suggested:

℞ Quin. hydrochloridi ..... gr. v | 30
Acidi hydrochlor. dil. ..... m. v | 30
Syr. simplicis ..... ℥ss | 45
Aquæ destil. q. s. ad ..... ℥iii | 90
M. Sig.: One teaspoonful every two hours.

Angina Pectoris.

Professor Huchard, in *Med. Press*, states the importance of distinguishing between true and false angina before instituting treatment. The latter gets well by suppressing the cause that provokes it—hysteria, neurasthenia, gastric troubles, over-indulgence in tobacco. But in true angina pectoris it is of but little use to treat the causal affection—gout, diabetes, syphilis, malaria—for the result is always negative. Consequently, according to Professor Huchard, it is not the pathologic cause that should receive attention, but the anatomic cause, viz., disease of the coronary artery. A double medication is, therefore, necessary; one addressed to the inflammation of the arteries, the other to the threatening syncope. Sodium or potassium iodid (the latter being more active if well borne) may be given as follows, and will meet the first indication:

℞ Sodii vel. pot. iodidi ..... ℥i | 4
Aquæ ..... ℥x | 300
M. Sig.: One tablespoonful three times a day.

Against the danger of syncope vasodilators are prescribed. Previous to beginning the medical treatment attention should be given to the diet, which should be lacto-vegetarian and without salt as much as possible. As to the remedies given along with the iodids he gives theobromin as being one of the best diuretics. It eliminates the chlorid of sodium, the toxins and the vasoconstrictive substance from the organism. Ten grains are recommended at a dose, twice a day for fifteen days. Nitroglycerin is given in solution, in tablet form or hypodermically. In solution it may be prescribed as follows:

℞ Sol. nitroglycerini (1 per cent.) ..... ℥i | 4
Aquæ ..... ℥x | 300
M. Sig.: Two to four tablespoonfuls a day.

This preparation, like other vasodilators, not infrequently provokes violent headaches. In such instances the dose should be diminished gradually, and not give a dose too weak to be of benefit.

As a substitute for the nitroglycerin, M. Huchard recommends the following containing sodium nitrite combined as follows with other diuretics:

℞ Sodii nitritis ..... gr. xv | 1
Pot. nitratis ..... ℥ii | 8
Pot. bicarb. ..... ℥iv | 15
Aquæ q. s. ad ..... ℥vi | 180
M. Sig.: One tablespoonful each morning. The extract of cactus grandiflora in one-grain pills three times a day is an excellent cardiac tonic.

When the heart shows signs of weakness digitalin given in solution—ten drops (.65) of a 1-1,000 solution of crystallized digitalin once a day for five days is of service.

When an attack comes on suddenly, amyl nitrite is the preparation to give to relieve the patient. As to general treatment the patient is warned against violent exercise, constipation, long walks against the wind or after meals.

Appendicitis.

Jonescu, in *Ther. Review*, states as his opinion, after many years of experience, that all cases of appendicitis should be treated medicinally in the beginning. His treatment consists of absolute rest in bed, extract opii ¾ to 1½ grains (.05-.10) daily, ice to the abdomen, starvation diet, large amounts of normal saline solution given subcutaneously or intravenously, and lavage in cases of persistent vomiting. Surgical interference is recommended by the author only after the initial peritoneal symptoms have abated, whether the condition has localized itself with or without abscess formation. The search for the appendix should not be carried too far, and its removal performed only when it is easily found. Intestinal fistulæ, which may remain after the operation, should be left to themselves as they usually heal spontaneously.

Burns of the First Degree.

The following combinations are recommended in an abstract in *N. Y. Med. Jour.* for burns:

℞ Thymol ..... gr. ix | 60
Olei limi ..... ℥iv | 120
Sodii bicarb. ..... ℥ii | 60
Aquæ calcis ..... ℥iv | 120
M. Sig.: Shake well and anoint the burnt surfaces thoroughly and cover with absorbent cotton; or:

℞ Ext. opii ..... gr. ivss | 25
Ichthyol
Lanolini
Liq. petrolati, ää ..... ℥iii | 12
M. Ft. unguentum. Sig.: Apply locally.

Erysipelas.

Dr. A. Herzfeld, in *Critic and Guide*, after stating his experience in the treatment of erysipelas with alcohol, unguentum hydrargyri, the iodin treatment in the form of the tincture of iodin and the compound iodin ointment, unguentum Credé and carbolized vaselin, recommends the following outline of treatment as the best to be employed in the treatment of this affection: The affected surface is first washed with pure alcohol, after which an ice cold, diluted solution of plumbi subacetate to which tincture of opium has been added in the proportion of one ounce (30.) to a pint (500.), is constantly applied. The affected surface is kept constantly moist by these applications, which have the advantage of relieving the pain considerably. If large amount of the foregoing preparations should be required, as in dispensary work, the following formula is recommended:

℞ Liq. plumbi subacetat.
Tinct. opii, ää ..... ℥viii-xvi | 250.-500
M. Sig.: Two tablespoonfuls to a pint of water and applied locally.

After the acute symptoms have subsided, ichthyol is applied to the affected surface in the form of an ointment as follows:

℞ Ichthyoli ..... ℥iv-℥ii | 15.-60
Adipis lanæ ..... ℥v | 150
M. Ft. unguentum. Sig.: Apply locally.

The author prefers wool fat as the basis of an ointment because it is neutral in reaction, it does not contain any fatty acid, nor any compound which will produce a fatty acid; allows an easy and rapid penetration of the medicine through the skin, and is not readily affected by chemical change. The older ointment bases, such as adeps, unguentum simplex, vaselin and oleates, often irritate the skin and absorption takes place rather slowly. In the internal treatment of erysipelas, salol, in powder form, has been of best service to the writer. In severe cases the use of stimulants for cardiac depression may be required, hydrotherapy for hyperpyrexia, while necrosis and suppuration may require surgical interference.

Smolitcheff, in *Med. Rev. of Reviews*, recommends the following combination in the treatment of erysipelas:

℞ Tinct. iodi ..... ℥vi | 24
Olei camphoræ
Ichthyoli, ää ..... ℥iii | 12
M. Sig.: Shake well. Apply locally two or three times daily.

The following combination locally has been recommended in local treatment of erysipelas:

℞ Acidi tannici ..... gr. xxx | 2
Pulv. camphoræ ..... ℥i | 4
Spts. etheris ..... ℥v | 20
M. Sig.: To be painted over the affected area every hour or two.

Aristol is also a good antiseptic applied in the following manner:

℞ Aristol ..... gr. xv | 1
Collodii ..... ℥i | 30
M. Sig.: Paint freely over the affected area with a camel's hair brush, covering a small portion of the surrounding healthy skin.

Medicolegal.

Duty to Provide Proper Medical Treatment for Seamen.—The Supreme Court of the United States affirms the judgment in the case of the *Iroquois*, reported on page 467 of THE JOURNAL

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of Feb. 14, 1903, holding it to have been the duty of the master to put into an intermediate port for surgical aid for a seaman injured, who fractured two ribs and his right leg in two places by a fall. It says that the duty to provide proper medical treatment and attendance for seamen falling ill or suffering injury in the service of the ship has been imposed on the shipowners by all maritime nations. It appears in the earliest codes of continental Europe and was expressly recognized by this court in the recent case of the *Osceola*, 189, U. S. 158. On large passenger steamers a physician or surgeon is always employed, whose duty it is to minister to the passengers and crew in cases of sickness or accident. Of course, this would be impracticable on an ordinary freighting vessel, where the master is presumed to have some knowledge of the treatment of diseases, and in ordinary cases stands in the place of a physician or surgeon (the *Wensleydale*, 41 Fed. Rep. 602); but for the further protection of seamen, vessels of the class of the *Iroquois* are compelled by law to be provided with a chest of medicines and with such anti-scorbutics, clothing and slop chests as the climate, particular trade, and the length of the voyage may require. U. S. Revised Statutes, sections 4569, 4572, 4573. What is the measure of the master's obligation in cases where the seaman is severely injured while the ship is at sea has been made the subject of discussion in several cases; but each depends so largely on its own peculiar facts that the rule laid down in one may afford little or no aid in determining another, depending on a different state of facts. The early cases of Harden vs. Gordon, 2 Mason, 541, and Reed vs. Canfield, 1 Sumn. 195, contain an exhaustive discussion of the general subject by Mr. Justice Story. We can not say that in every instance where a serious accident occurs the master is bound to disregard every other consideration and put into the nearest port, though if the accident happen within a reasonable distance of such port, his duty to do so would be manifest. Each case must depend on its own circumstances, having reference to the seriousness of the injury, the care that can be given the sailor on shipboard, the proximity of an intermediate port, the consequences of delay to the interests of the shipowner, the direction of the wind, and the probability of its continuing in the same direction, and the fact whether a surgeon is likely to be found with competent skill to take charge of the case. With reference to putting into port, all that can be demanded of the master is the exercise of reasonable judgment and the ordinary acquaintance of a seaman with the geography and resources of the country. He is not absolutely bound to put into such port if the cargo be such as would be seriously injured by the delay. Even the claims of humanity must be weighed in a balance with the loss that would probably occur to the owners of the ship and cargo. A seafaring life is a dangerous one, accidents of this kind are peculiarly liable to occur, and the general principle of law that a person entering a dangerous employment is regarded as assuming the ordinary risks of such employment is peculiarly applicable to the case of seamen. To judge of the propriety of the master's conduct in a particular case we are bound, so far as possible, to put ourselves in his place, and inquire whether, in view of all the circumstances, he was bound to put into an intermediate port. The court lays no stress on the fact that the seaman in question did not ask to be taken into an intermediate port. He was a boy, largely ignorant of his rights and duties. The master was his legal guardian in the sense that it is a part of his duty to look out for the safety and care of his seamen, whether they make a distinct request for it or not.

Absent Treatment and the United States Postal Law.—In the case of the United States vs. Post, tried in the United States District Court, Southern District of Florida, there were four indictments under the law, which provides, in substance, that, "if any person, having devised any scheme to defraud, to be effected by opening or intending to open correspondence through the United States mail, shall, for executing such scheme, deliver any letter, book, writing, circular, pamphlet, or advertisement in any postoffice of the United States, he shall upon conviction, be punished." The first three indictments charged, in substance, that the defendant had devised a scheme to defraud, which consisted, as was fully set forth, of making false and fraudulent representations as to her ability and power to cure persons by a so-called "absent treatment," without intending to give such treatment, or to cure persons, as she had promised to do. The fourth indictment charged that the offense consisted more especially in promising to cure third persons without their knowledge, or without direct influence on them, by treating through an intermediate person, and that she could not so cure them, and that she knew she could not, and that she did not intend to cure patients by such treatment. The foundation of the contention of the government was that what was promised to be done could not have been intended, because the fulfillment was known to be impossible by the means proposed by the defendant, viz., the transfer of the power of her thought to the person of the patient with a curing influence sufficient to accomplish the changes in condition that were declared could be accomplished, and particularly in the cases of treating a third person unaware of such contemplated treatment through a second party. The contention of the defendant was that what she had promised was to be performed by the discovery of a new law of mental healing, by which healing thoughts could be sent out for the purpose of cure. The law of the case is contained in the charge of District Judge Locke to the jury, in which he stated, among other things, that there are well-settled and accepted natural laws, a recognition of which is justified by the long experience of men, the knowledge of everyday life as well as by the studies and experiments of ages. Of these we may take cognisance—the laws of gravitation, cohesion, of optics, the phenomena of electricity, etc. But when one contends that he has made new discoveries in science or art, opposed to the general experience of man for ages, and directly in conflict with the generally accepted rules, and seeks to gain money or secure profit thereby, the burden of the proof of the truth of such discovery is on the party making the claim, and the truth of such contention must be satisfactorily proved before it can be accepted. As to the contention of the defendant, through all of her published works, that she could actually send, by emanations from her own mind, such power as would, after passing through the mind of a second person, influence the physical condition of a third person, which power it was further claimed could be taught to any class in a four weeks' course, the judge declared that he had no hesitation in saying that this power was not recognized as a natural law by the experience of mankind, and that she was attempting to establish a new and unrecognized law of nature, and therefore the burden rested on her to satisfy the jury that she possessed such power, and could do what she promised and advertised to do. Where testimony is directly contrary and in opposition to the well-established laws of nature, accepted by all men from the experience and study of ages, such testimony may be properly ignored without contradiction. So the testimony of several parties that they had been treated by the defendant and cured, it appearing that they were at the time great distances from her, and totally ignorant of her acts and doings at the time, was so contrary to the well-established rules of evidence and natural laws that it could not be accepted as stated. Furthermore, if any phenomena or pretended result of any new idea or new discovery in science which is contrary to nature as recognized can be explained and accounted for on natural principles and known laws, rather than by those which are in opposition to such, the natural explanation should be accepted, and such phenomena or results rejected as evidence of the pretended discovery. Therefore, if the jury should believe from the evidence that the cures or improvement of the patients so testified to might have resulted from the hopeful condition of their own mind, although suggested by the letters from the clerks of the defendant, or from any natural limitation or course of the disease, and not from any thoughts emanating from the mind of the defendant, the jury were not bound to accept such evidence as sustaining the contention of the defendant. Again, the judge said that the knowledge of the party at the time of making a promise or holding out an inducement for profit or gain is a good test of

the intent of the party making it. No sane person of reasonable judgment can be considered as intending to do that which he at the time knows is and will be impossible for him to do. Therefore, if it was found that at the time the defendant promised, as was charged, that she could and would cure as she said she would, she knew she could not so cure, her intelligence might be inquired into to determine whether or not she intended to give treatment or any other equivalent for what she had promised. What the verdict was is not stated in the report of the case.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

American Medicine, Philadelphia.

June 4.

1 *Conservative Treatment of Acute Appendicitis. A. W. Morton.
2 Leishman-Donovan Blood Parasites (a Synopsis). Joseph McFarland.
3 *Varicocele. Henry D. Furniss.
4 *Results of the Roentgen Method in the Diagnosis of Renal Calculus. Charles Lester Leonard.
5 *Neuroses of Nasal Origin. G. Hudson-Makuen.
6 Importance of a Correct Diagnosis in the Treatment of Disease of the Stomach, with a Summary of 30 Consecutive Cases. Albert Woldert.
7 *Influence of Old Age, Diabetes, Arterial Sclerosis and Gout on the Healing of Wounds. Wells P. Eagleton.
8 The Care of the Insane. W. J. Howells.

1. **Conservative Treatment of Acute Appendicitis.**—Morton favors Ochsner's method of treating the acute attack by rest, and believes that all of the cases can be carried through and patients operated on in the interval.

3. **Varicocele.**—Furniss describes the condition and advises conservatism in ordinary cases where serious symptoms and discomfort are not produced. The operation itself is not entirely a safe one, and is more dangerous than generally supposed, as is shown by illustrative cases. Asepsis should be as complete as possible. Greater care is required in asepsis here than in some apparently more serious operations. We should operate with as little trauma as possible and be careful not to injure the vas, the blood supply, the testicle, epididymis, etc. Subcutaneous ligation of the veins is objectionable, for a vein may be isolated under the impression that it is the vas and the vas be ligated for a vein. The swelling is also greater than with the open method. A small vessel may be punctured, giving rise to a bleeding that may necessitate incision and evacuation with ligation of the bleeding point, furnishing admirable culture media for germs. The open operation is the one of choice, and a high incision is better than one through the scrotum. He describes the method as given by Kocher in the fourth edition of the "Chirurgische Operationslehre." It consists in incising above Poupart's ligament, separating the cord and veins with resection, after the isolation of one to three inches of the veins. The veins are ligated with a No. 2 plain catgut in two places, and the distance between is proportionate to the amount to be resected. After resection the ends are united by tying the ligatures, which have been left long for the purpose, and with one or two stitches. All the bleeding points should be controlled by ligatures. The wound should be closed with a subcutaneous suture of plain catgut and dry sterile gauze dressings applied. An important point is the supporting of the scrotum while the patient is in bed with a suspension bandage and perfect asepsis.

4. **Renal Calculi.**—The value of the Roentgen ray in the diagnosis of renal calculi is pointed out by Leonard, though he does not advise entire dependence on it.

5. **Neuroses of Nasal Origin.**—Makuen briefly refers to a number of forms of neuroses relieved by nasal operations, and holds that it is reasonable to suppose, though not absolutely proven, that some of the more serious mental and cerebral diseases may be of nasal origin. Many so-called reflex nasal neuroses may be so explained on the theory of faulty respiration and impaired cerebral circulation due to direct intranasal pressure and the absorption of toxic catarrhal products through the blood and lymph. A careful examination of the nose is imperative in all doubtful cases of nervous disease.

7. **Healing of Wounds.**—Eagleton discusses the influence of old age, diabetes, etc., on the healing of wounds. He thinks the essential consideration in operating on old people, aside from damaged kidneys, heart, etc., is to guard against shock. This being eliminated, union may be as rapid as in younger patients. As to diabetes, the danger is from the low vitality of the tissues and the special liability to infection which is aided by the arteriosclerosis so frequently associated. We should remember the frequent association of this arteriosclerosis, and interfere as little as possible with the blood supply, keeping in mind the special liability of the tissues to infection, their low vitality and the danger of nerve degeneration, avoiding the possibility of even slight pressure over the site of operation.

Boston Medical and Surgical Journal.

June 2.

9 *A Study of Certain Cases of Sarcoma of the Long Bones from the Massachusetts General Hospital Clinic. Charles L. Scudder.
10 *Disinfection of the Clinical Thermometer. Francis P. Denny.

9. **Sarcoma of the Long Bones.**—Scudder analyzes 15 cases of sarcoma of the long bones treated in the Massachusetts General Hospital, where the history could be obtained. He does not speak positively as to cured cases, for metastases may occur even after five years, but there have been two cases at least of 6 and 15 years' freedom from disease in cases operated on for giant-celled sarcomata. He points out the lesser malignity of the giant-celled than the round- or spindle-celled form, and discusses the propriety of excision in these cases rather than amputation. He thinks it may be advisable in very carefully selected cases and only in such. A detailed report of cases concludes the paper.

10. **Thermometer Disinfection.**—The method advocated by Denny is that of inserting a wad of cotton with a few drops of formalin in the end of the thermometer case as a disinfectant, and he gives the result of experiments and controls. In the 25 tests made with diplococcus, staphylococcus, typhoid bacillus, etc., there were no results in any instance, though in some cases the formalin had been put in the case a number of weeks prior to the test. All the controls showed growth. He thinks the convenience as well as the efficacy of this method should insure its more general use by the practitioner.

Medical News, New York.

June 4.

11 Some Considerations on Infection and Immunity. Thomas E. Satterthwaite.
12 *Notes on the Epidemic of Cerebrospinal Meningitis. Henry D. Chapin.
13 *Clinical Features of Cerebrospinal Meningitis, or Cerebrospinal Fever of the Epidemic Type. Henry Koplik.
14 A Plea for the Organization of a "Society of Sanitary and Moral Prophylaxis." Prince A. Morrow.
15 Management of Occiptoposterior Positions of the Vertex. James D. Voorhees.
16 Scurvy in Infants. William F. Cheney.

12. **Cerebrospinal Meningitis.**—Chapin points out some of the features of cerebrospinal meningitis in the present epidemic form in New York; the abrupt onset, the severity of the initial symptoms standing in some relation to the type of the attack, the contraction and rigidity, but after its characteristic beginning he finds it very irregular in its manifestations. Cases that apparently are inevitably fatal may take a turn for the better and vice versa. Tonic spasm or muscle cramp of the back of the neck is one of the most constant features. The temperature and pulse show the greatest variations without any characteristic features apart from this, some cases running their course with but little increase; others showing a very high temperature. In many cases the brain is seriously crippled and the patient never regains the former mental and physical strength. In all the cases except two the *Diplococcus intracellularis* was found.

13. **Cerebrospinal Meningitis.**—Koplik analyzes 77 cases occurring at the Mt. Sinai Hospital; 60 per cent. were under two years of age, the oldest being fourteen years. All the cultures corresponded to those described by Weichselbaum. The clinical picture, onset and general course of the disease were rather typical, though there were some variations. Neck rigidity is present, he thinks, at some time in all the cases.

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Opisthotonos was present in about 70 per cent. The Babinski reflex was not so common as in tubercular meningitis where it is a constant characteristic. This sign, however, is of very little value in children below two years of age, and the Kernig symptom was also found of little value in infants. In all cases above two years of age it was present. In tubercular meningitis its presence was not so constant, but he does not lay much stress on its presence as a pathognomonic sign. Hyperesthesia and mental irritability were present in all cases. He thinks that MacEwan's sign—a hollow note over the anterior horn of the lateral ventricle—is of value in making up the clinical picture of tubercular meningitis, though it is not so common in the epidemic cerebrospinal form. If the patient sits upright and the head is inclined to one side, percussion of the inferior frontal or parietal bone will give a tympanitic note. In the epidemic form this note is not obtained in the majority of cases. The range of temperature was often very marked, wildly irregular at times. Fundal changes were not present in his examinations, though they were common in the tuberculous form. There was a leucocytosis in fully 40 per cent. of the cases, even the younger ones, but a prognosis as to recovery or fatal issue can not be made from the leucocyte count alone without taking into account other conditions. The examination of the cerebrospinal fluid showed the predominance of polynuclear cells in chronic cases, but he does not think this is of great value in determining the form of meningitis; the older the child the better the chance of recovery. He has records of cured cases in infants of five months. The most common complication appeared to be otitis. In most of the recovered cases there was little serious injury to the nervous system. He thinks the disease is a self-limited one, and that all we can do is to relieve the suffering and treat the complications. Lumbar puncture has not proven curative in his cases, though his experience has been quite extensive and there have been no accidents that might be directly or indirectly attributed to the procedure.

Medical Record, New York.

June 4.

17 Some Thoughts Suggested by the Statistics of the Health Department, Especially Concerning Typhoid Fever and Smallpox. George L. Peabody.
18 *Pathologic Distinctions Discernible in the Radiograph in Certain Diseases of the Long Bones. Eugene H. Ehling.
19 *Treatment of Epidemic Cerebrospinal Meningitis by Intraspinal Antiseptic Injections. Charles E. Nammack.
20 Myocardial Change from the Clinical Side. John W. Boyce.
21 *Use of Rubber Tissue and Boracic Acid in the Treatment of Surface Granulating Wounds, and Especially of the Varicose Ulcers of the Leg. W. Scott Schley.
22 *Case of Bilharzia Hematobia Infection. T. N. Rafferty and H. N. Rafferty.
23 X-ray Diagnosis of an Interesting Case. L. D. Weiss.

18. The Radiograph in Disease of the Long Bones.—Ehling points out the value of the radiograph in the diagnosis of diseases of the long bones, limiting himself to a study of inflammatory and neoplastic conditions. When the periosteum is irritated or inflamed a good radiograph will present various phases of alterations, and, he thinks, permit of deductions that throw light not only on the kind of irritation, but also on the period of time that it has been active. Hemorrhage into the periosteum or between it and the bone will be recognizable or not, according to the age of the lesion. A subperiosteal collection of pus may present the identical picture, but this point the clinical symptoms must determine. The main point, however, is to bring out the difference between osteoperiosteal neoplasms and osteomyelitis and to show the radiographic characters of the two large groups of carcinoma and sarcoma. Radiographs of carcinoma show an area of rarefaction which is circumscribed, rather sharply demarcated, not giving the mottled appearance shown in osteomyelitis. The size of the area of rarefaction is commensurate with the length of time of the clinical symptoms. Of sarcoma there appear to be two groups: 1, the myeloid or giant-celled sarcoma, very characteristic and showing an area of erosion of bone and periosteum, not of rarefaction as in the case of carcinoma, but of bone resorption, as if the part had been taken out with a gouge; 2, spindle- and round-celled osteosarcomata present different pictures. These tumors usually cause a gradual fusiform dilatation of the shaft of the bone. The bone itself is homogeneous or at least does not show the sudden transition of light and shade to be seen in radiographs of osteomyelitis. The features characteristic of osteomyelitis in the radiograph are a bone swelling occupying a segment of the bone, or perhaps the entire length, irregularly fusiform. The area of disease presents a mottled appearance, the result of irregular translucency caused by liquefied areas and small areas of density where bone has become thickened. He does not wish to imply that the radiograph is absolutely infallible, but it may, when properly interpreted, throw light on the conditions.

19. Epidemic Cerebrospinal Meningitis.—The use of lysol intraspinal injections in 5 cases is reported by Nammack, 4 of these cases proving fatal, 3 from complicating conditions, all in adults. In one case, an Italian boy seemed to be benefited and recovered. He remarks that the use of lysol is reasonably safe in fairly strong solutions.

21. Rubber Tissue in the Treatment of Granulating Surfaces.—The method advocated by Schley is to use rubber tissue, overlapping the area to be treated by several inches, after local applications of well-powdered boracic acid, and covering it with absorbent gauze, again overlapping its edges, and fixing the whole with a snug supporting bandage. As a rule the dressing should be left undisturbed for at least five days or a week, and sometimes even longer. The boric acid acts as an antiseptic astringent; the irregular surface of the gauze wrinkles the rubber tissue, giving a chance for the epithelium to climb; the smooth surface of the tissue insures a smooth surface to the granulations. He finds that this seems to work well on flat, firm, granulating surfaces, burns, etc. The possibility of toxic absorption of boric acid is mentioned, but so far there has been no such effect. The general results of the treatment in the cases in which it was applied seemed to be entirely favorable.

22. Bilharzia Disease.—Drs. Rafferty give additional facts in a case previously reported by Dr. Edwin Walker of Evansville in THE JOURNAL of the American Medical Association, giving here the blood and microscopic findings. The peculiarities are the occurrence of the case in this country when there has been no residence abroad, the almost universal distribution of the organism in the body, it having been accurately demonstrated in blood from the left lung, stomach, lower bowel, probably from the pelvis of the left kidney, from the peripheral circulation, in the urine, and fluid from a cyst in communication with the urinary bladder. Other peculiar features are the excessive hemorrhages over a long period of time and the resistance of the patient, who has undergone two successful abdominal operations and has been a semi-invalid for ten years.

New York Medical Journal.

June 4.

24 Fractures of the Lower End of the Radius. Vertner Kenerson.
25 The Fever of the Puerperium (Puerperal Infection); a Chronologic Review of the Doctrines of Its Etiology and of the Methods of Treatment from Early Times to the Present. (To be continued.) James Hawley Burtonshaw.
26 *Medical Aspects of Decapsulation of the Kidneys for the Cure of Chronic Bright's Disease. Arthur R. Elliott.
27 *A Consideration of the Surgical Treatment of Chronic Bright's Disease from the Ophthalmic Standpoint. George F. Suker.
28 *A New Operation for Puerperal Sepsis. Swithin Chandler.
29 Case of Atheroma and Aneurism of the Abdominal Aorta at the Age of 21 Years. Charles R. Andrews.

26. Kidney Decapsulation.—Elliott analyzes the statistics of kidney decapsulation and points out the following facts to be accentuated as vitally affecting the subject:

1. Chronic Bright's disease in its development constitutes a diseased condition of the entire system.
2. It is a disease of very gradual development, and in the great majority of cases, has existed for months and years before the patient comes under observation.
3. It is produced by a chronic toxemia, either systemic or infective in origin, which produces coincidentally as a result, widespread arterial and cardiac degenerative changes, which, being once established, are permanent, and which in their development eventually constitute the most threatening element of the disease.
4. General edema or anasarca in chronic renal disease is in many instances in great measure a cardiac dropsy, brought about by advancing myocardial degeneration. It is occasionally so in chronic parenchymatous nephritis, and almost invariably so in chronic interstitial nephritis.
5. It may be stated that, in like manner, developing anuria and

uremia in chronic nephritis may be largely cardiac in production, the functional inadequacy of the kidneys having its inception in the fall of blood pressure incident to circulatory failure.

6. In the later stages of chronic nephritis, of whatever character, the case is apt to take on these cardiac aspects, which virtually convert the therapeutic problem into a question of sustaining a failing heart.

7. Albuminuric retinitis must be looked on as one of the terminal symptoms of chronic nephritis. The concordance of opinion places a limit of two years on the prognosis after development of this complication. The statistics gathered by Suker of cases operated on show that, in place of prolonging this limit of expectancy, operation has a decidedly contrary effect.

8. It is to be borne in mind that chronic nephritis is a disease of slow and spasmodic development. It is well to realize its exacerbations and remissions, so as to avoid the error of mistaking remissions for cures.

9. The mere fact that the general condition of the patient improves somewhat after decapsulation does not establish the validity of the operation, for hygiene and rest will do the same for the patient to a remarkable degree in many cases. As the factors of hygiene and rest are invariably associated with the surgical procedure, it is possible that the resulting benefit may, to some extent, accrue from these sources.

10. The results of experimentation demonstrate that, within a period of three months and a half after decapsulation, a new and, in most cases, a tougher fibrous envelope has taken the place of the original capsule. This fact may account for the many relapses and deaths after that period in cases operated on, and in chronic cases, at least, it narrows the prospect of improvement to a period of months.

27. Kidney Decapsulation.—Suker takes up the subject from an ophthalmologist's point of view, and concludes that at least 25 per cent. of cases of all kinds and varieties of chronic Bright's disease show evidence of retinal or other serious fundus complications. These are usually of a degenerative type, attended with like kidney change, and the cardiovascular system is, or shortly will be, seriously involved, and changes may develop without any subjective symptoms. All these may be accepted as proof of a general circulating systemic toxin, designating the acme of the development of the Bright's disease. The death rate of this class of cases under the best medical treatment is about 75 per cent. for the first year and 85 for the second, while in cases operated on it is 100 per cent. for the first year. As these fundus findings are of paramount prognostic import in an inverse ratio to the age of the patient, and as the medical aspect of the question as presented by Dr. Elliott offers as good if not far better results than decapsulation in like cases, the surgeon must consider all this in an endeavor to establish the validity of the operation. Suker thinks he has ample reasons to believe conservatively, from the facts above detailed, that he has conclusively proven that decapsulation of the kidney for chronic Bright's disease is absolutely contraindicated in such cases as present retinitis or neuroretinitis with or without hemorrhages.

28. Puerperal Sepsis.—The operation recommended by Chandler and which he says he has been performing for the past six years, is described as follows:

> Make an incision posteriorly to the cervix in the posterior vaginal wall; then pass a pair of long blunt-pointed forceps, slightly curved, in the cervical canal, up into the cavity of the uterus; these puncture the posterior wall of the uterus in the center, near the top of the uterus. Then introduce with two fingers a piece or strip of iodoform gauze through the posterior vaginal opening previously made, clasp the gauze with the forceps, and drag the same through the uterine wall and out through the vagina. Repeat this by puncturing the uterus on each side, but posteriorly and just about the middle of the body of the same, drawing the gauze through the same as in the first attempt.

He admits that it produces a certain injury to the organ, but claims that it is conservative, easily performed by the experienced and treats the organ as an infected part, gives drainage to the uterus and to those tissues and vessels shown by postmortem examinations as liable to be affected. The mortality is also lowered, though a larger number of cases will be required to demonstrate this than are at present available. He reports four cases.

Cincinnati Lancet-Clinic.

June 4.

30 Public Prophylaxis of Syphilis and Venereal Diseases. A. Ravogli.
31 A Neglected Factor in a Medical Problem. David R. Silver.

St. Louis Medical Review.

June 4.

32 State Action for the Control of Human Tuberculosis. George Homan.

Annals of Surgery, Philadelphia.

May.

33 *Lymphatic Constitution. Care of the Lymphatics During and After Surgical Operations. Frederick Gwyer.
34 Pulsating Exophthalmos Due to Traumatic Aneurism of the Internal Carotid Artery. Harold L. Barnard and Hugh M. Rugby.
35 Rhinophyma. Report of a Case, with Operation for Its Relief. William W. Keen.
36 *Staphylithiasis. O. Theodore Roberg.
37 Stricture of the Esophagus Due to Typhoid Ulceration. James E. Thompson.
38 *One Hundred Cases of Gastro-enterostomy for Simple Ulcer of the Stomach and Duodenum. B. G. A. Moynihan.
39 *Post-operative Pneumonia, with Experiments on Its Pathogeny. W. Louis Chapman.
40 Diagnosis of Abscess of the Liver. Thomas L. Rhoads.
41 *Treatment of Posterior Perforations of the Fixed Portions of the Duodenum. John Edward Summers, Jr.
42 Intestinal Obstruction Due to Fibrous Stricture Consequent on Strangulated Hernia, with an Account of Three Cases. Percy W. G. Sargent.
43 Papilloma of the Renal Pelvis with Massive Hydronephrosis. Harry R. Reynolds.
44 Roentgen Ray Diagnosis of Renal Calculus. Joseph F. Smith.
45 Ureterocystostomy for Accidental Wound of the Ureter in Vaginal Hysterectomy. E. C. Dudley.
46 *Injuries to the Axillary Vessels Occurring During Operations for Carcinoma of the Breast. Richard H. Smith.
47 Arteriovenous Aneurisms. Warren S. Bickham.
48 Skin-grafting Infected Areas. Sidney F. Wilcox.
49 Treatment of Fractures. Gwilym G. Davis.
50 A New Osteoplastic Amputation at the Ankle-joint. Alexis V. Moschcowitz.
51 *Some Observations on the Effects Produced on the Skin by the Discharge of Small Arms Loaded with Smokeless Powder. Alexander B. Johnson.

33. The Lymphatic Constitution and Surgery.—Gwyer calls attention to infection through the lymphatics after surgical operation, claiming that the use of a sharp knife may sometimes assist in this infection by leaving the channels open. His own method is to occlude all bleeding vessels and, after extirpation of the lymphatics, carefully ligate the point of exit of the vessel as he would the arteries or veins. As for the lymphatic spaces, he rubs sterilized vaselin or a thick ointment, such as iodoform ointment made with vaselin or lanolin, thoroughly over all the raw surfaces. This, he thinks, occludes the lymphatic spaces and smaller vessels until there is no more danger of absorption. In case of ordinary abscess, as soon as the pus is evacuated and the cavity is washed out, he swabs it dry and throws in enough ointment to fill it. In the after-treatment of infected cases with cavities, it is his custom to fill them with ointment with each dressing or ocasionally. The ointment should be something that will dissolve, hence, he would not recommend bismuth or oxid of zinc and there should not be enough poisonous material, such as iodoform, to affect the patient.

36. Salivary Calculus.—Roberg reports a case and discusses the etiology. He thinks that something in addition to bacteria is necessary to explain the production of salivary calculus, and that this something appears to be a foreign body. Foreign bodies can easily enter Wharton's duct, which is the one most usually affected, owing to its size and the location of the orifice. Whether a constitutional condition can produce it is not certain. In only one case have calculi been found in more than one gland or duct. It appears probable that an increase in the total solids of the saliva may be a predisposing factor. The diagnosis is easy. The treatment consists in evacuation of the abscess, removal of the calculus and in some cases extirpation of the gland. He gives a bibliography.

38. Gastric and Duodenal Ulcer.—Moynihan reports an experience of 100 cases, calling attention to the fact that the operation of gastroenterostomy is so safe and its results so good that he thinks it is the most desirable operation in all cases of chronic gastric ulcer. Its success depends largely on the care and preparation of the patient, the speed in operating, the choice of a method which is simple and does not need a long exposure of the viscera, and the details of the after-treatment. Of his 100 cases there were at least a dozen that he would not have been surprised to lose, but the mortality percentage was only 2.

39. Postoperative Pneumonia.—The causes of postoperative pneumonia, especially the effect of ether, are treated of by Chapman, who, from his experimental studies, considers the following conclusions justified:

> 1. Prophylaxis. Care in ether-giving lessens shock and respiratory irritation, which reach their maximum when an unnecessarily large amount of ether is given. 2. The disinfection of the mouth and oropharynx by peroxid before operation is a rational precaution. 3. Adequate air space is of even greater importance in surgical wards than in medical. 4. A careful auscultation and

percussion of the chest should precede every operation, and if there be signs of disease, operations of election should be postponed until the chest condition is more favorable. 5. A complete clinical record of all cases of postoperative pneumonia, together with a record of the previous state of the patient, is most desirable, and such records will in time greatly enrich our incomplete knowledge of the factors which predispose to the complication. 6. It is possible to demonstrate experimentally the lesions produced by suffocation and etherisation, and the safe philosophy which explains post-operative pneumonitis may be applied to that which occasionally follows poisoning by carbon monoxid and illuminating gas.

41.—See abstract in THE JOURNAL of January 16, p. 193.

46. Injuries to the Axillary Vessels in Operations for Cancer.—Smith has reviewed the literature of this accident, and finds that injuries to the axillary veins during cancer operations under aseptic methods are not serious. Passive edema of the arm rarely occurs, and is slight and transient. Slight hemorrhages may be repaired by lateral ligation or a running suture. A forceps left in place forty-eight hours may be used where the application of suture is difficult. With extensive injury to the veins or when the situation of the diseased tissue makes it desirable, it may be boldly tied above and below and the lumen occluded without fear of bad results. As to injuries to the artery, the material is too small to permit definite conclusions. There was no permanent bad result in the five cases reported. Artifical heat during recovery of circulation seemed necessary in the cases where the artery was occluded.

51. Action of Smokeless Powder on the Skin.—From experiments made on cadavers with modern repeating firearms using smokeless powder, Johnson concludes that the traces left are much less distinct and definite than those from black powder. With the weapons used such marks cease to be produced when the distance exceeds one foot and the shot is fired at the naked skin. At a distance of three inches or less powder marks may be present, but they will always be faint and may in many instances be wiped away from the skin with a wet or dry cloth. If the injury is to a part of the body covered with clothing no powder marks at all will be found on the skin. The clothing will never be scorched no matter how near the weapon is held. If the clothing is wool no mark can be detected on it even at the closest range. In linen clothing a faint mark may be found if the weapon is held at a distance of three or four inches, or less. It might be possible in some instances to state definitely what sort of ammunition was used in producing the wound. This might be of importance from a medicolegal standpoint. He thinks further experiments in this line are desirable.

Therapeutic Gazette, Detroit, Mich.

May 15.

52 Artificial Dilatation of the Cervix. Stricker Coles.
53 *Consideration of the Value of Topical Applications to the Upper Air Tract. Frank W. Hinkel.
54 *Modern Hypnotics. V. Coblentz.
55 Splint for Fracture of Femur in a Child. A. W. Mitchell.
56 *Tuberculosis and the Roentgen Ray. Wm. S. Newcomet.

53. Topical Applications to the Upper Air Passages.—Hinkel offers the following tentative summary in a non-dogmatic way of the value of topical applications to the upper air tract. Powder insufflations are an inefficient form of medication in this region. Inhalations of medicated steam are useful in the early stages of catarrh and catarrhal inflammations, the higher the temperature and the greater the saturation, the more efficient is the inhalation. Dry inhalation is of little use. Inhalation of smoke from a smudge of suitable medicaments will usually control a paroxysm of asthma, but finely nebulized oils suitably medicated are more elegant when equally efficient. Gargles are of little value unless the patient be directed and trained to use them in a way to give the greatest possible access to the pharynx and nasopharynx. They can be used occasionally as an efficient means to cleanse the nasopharynx and nasal chambers. Douches are chiefly used for applying cleansing alkaline solutions to the nasal passages and nasopharynx. Cleansing solutions are the most important topical applications in the upper air tract and remove decomposing secretions. Care must be taken that the amount is not too large or too much force used so as to carry infection to the middle ear. Drugs used other than for cleansing purposes act as irritants to the mucosa or by absorption into its tissues. Irritants or absorbents in the hand of the physician are best applied as pigments or sprays, directly to the region it is desired to affect, even within the larynx or trachea. In the trachea the medicaments may be injected through the glottis directly on the walls. Sprays should be reserved usually for the use of the patient during the intervals between local treatment by the physician, and if the continuous influence of the drug is desired. We have good evidence of the prompt absorption by the mucous lining of the air tract of certain active drugs such as cocain, adrenalin, stramonium and atropin. Further experiments as to the absorbability of the different drugs are needed for rational local therapeutics of the nose and throat. It is not improbable that the massage attending the application of pigments to the mucous surface is an important factor in producing reactions in the circulation and in the glandular secretions. While we still have but an imperfect knowledge of the local effects of topical applications, local therapeutics must remain inferior to surgery in accuracy of application and efficiency in the treatment of chronic diseases of the nose, ear and throat.

54. Modern Hypnotics.—Coblentz reviews the usual hypnotics, including those that are already well known and such new ones as isopral, veronal, etc. As regards the sulphone group, including trional, sulphonal, etc., he says it is remarkable that the by-effects are so rare considering their extensive use and the frequent faulty method of application. He thinks these drugs have been employed, however, in too large doses, and he finds that 15 grains of trional are usually sufficient. They should be employed in alternation with other hypnotics and with strict observance of all the necessary precautions. Comparatively few really valuable hypnotics are known. Insomnia is of such a varied nature that the drugs that succeed in one case may fail in another. For this reason, therefore, it is well to have as many drugs as possible to make a selection. In the chronic forms of sleeplessness this is especially necessary where alternations of the drugs are advisable. A combination of two hypnotics is often more satisfactory than either alone, one supplementing the other.

56. Tuberculosis.—Newcomet reports the treatment of tuberculosis with the *x*-ray. The results have been negative in the pulmonary cases, but he thinks it of advantage in laryngeal tuberculosis. He reports cases where treatment by the *x*-ray was applied for sinuses after the removal of tuberculous glands in the neck, and in some cases with marked improvement. In others the results were negative. He thinks in suitable cases the use of the *x*-ray will prove a valuable adjunct in the treatment of these glands without operation.

Pennsylvania Medical Journal, Pittsburg.

May.

57 Address to the Pennsylvania Physicians Unaffiliated with County Medical Societies. John B. Roberts.
58 *Some Observations on the Pathology and Treatment of Empyema. P. Y. Eisenberg.
59 Statistics Relating to 1,135 Cases of Refraction Occurring in Private Practice. M. V. Ball.
60 Presentation of Some Cases of Penetrating Wounds of the Orbit. Alex. R. Craig.
61 Family Periodic Paralysis. George E. Holtzapple.
62 Abdominal and Pelvic Surgery Without Ligatures—Electrothermic (Heat and Pressure) Hemostasis. Andrew J. Downes.

58.—See abstract in THE JOURNAL, xli, p. 1105.

Clinical Review, Chicago.

June.

63 Gastro-intestinal Diseases of Infants. I. A. Abt.
64 Cerebral Syphilis. L. Harrison Mettler.
65 Diagnosis of Tumors of the Abdomen in Children. N. Filatov.

Journal of the Mississippi State Medical Association, Vicksburg.

June.

66 Summer Diarrhœa of Children. E. C. Coleman.
67 Post-Scarlatinal Nephritis. With Remarks on Some of the Acute Infectious Exanthemata. Robert E. Jones.
68 Convulsions of Childhood. T. J. Ray.
69 A Rational Method for Controlling the Spread of Venereal Disease. E. F. Howard.

Kansas City Medical Record.

May.

70 Sexual Orgasm a Physiological Function Requisite to Maintain Healthy Sexual Capacity. T. F. Lockwood.

Texas Medical News, Austin.

May.

71 Forceps: Their Indications and Use. H. L. Wilder.
72 Chlorosis and Anemia in Man Compared with Experimental Studies in Plant Life. E. F. Wright.

New Orleans Medical and Surgical Journal.

June.

73 Annual Report of 1904 to Edwin A. Alderman, LL.D., Tulane University of Louisiana. Stanford E. Chaillé.
74 Primary Carcinoma of the Vagina. Report of a Case. C. Jeff Miller.

New Yorker Medicinische Monatschrift.

May.

75 Post-partum Hemorrhage. L. A. Ewald.—Blutungen nach der Geburt.
76 General Treatment of Skin Diseases. Edward Pisko.—Allgemeinbehandlung bei Hautkrankheiten.

Canadian Practitioner and Review, Toronto.

June.

77 Operative Rhinology: Its Regulative Principles. J. P. Morton.
78 Sanatorium Treatment and Early Diagnosis of Pulmonary Tuberculosis. Ernest Wills.

Quarterly Journal of Inebriety, Hartford, Conn.

April.

79 *Pathology of Inebriety. T. D. Crothers.
80 Some Facts Regarding the Morphin Victim. William Lee Howard.
81 Toxicity of Methyl Alcohol in Extracts and Medicines. H. Mais.
82 Absinthism in France. Dr. Legrand.
83 Diseases Preceding and Following the Abuse of Alcoholism. T. D. Crothers.

79.—See THE JOURNAL of January 30, p. 294.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

The British Medical Journal, London.

May 28.

1 *Cough and Its Significance. Fred J. Smith.
2 Common Causes of Error in Examination of the Chest. J. Edward Squires.
3 *Tuberculosis in the South of Ireland. J. Darley Wynne.
4 Primary Intestinal Tuberculosis in Children: Perforation of Ulcers. Nathan Raw.
5 Suprarenalin in Pulmonary Hemorrhage. Duncan MacDonald.
6 A Case of Hemophilia Treated with Adrenalin Chlorid. Ernest Francis.
7 Physical Examination of 1,580 Girls from Elementary Schools in London. F. May Dickinson Berry.
8 Note on the Occurrence of Leishman-Donovan Bodies in "Cachexial Fevers," Including Kala-azar. Leonard Rogers.
9 The Leishman-Donovan Body. Sir Patrick Manson and George C. Low.
10 "Leishmania Donovani" in the Soudan. Sheffield Neave.
11 Note on the Lymphatic Glands in Sleeping Sickness. E. D. W. Greig and A. C. H. Gray.

1. **Cough.**—Smith reviews the subject of cough, pointing out its mechanism, the irritants which produce it, direct and reflex, its association with special febrile diseases as well as with tracheal, laryngeal and pulmonary conditions, discussing the diagnosis of the causes, methods of examination, importance of sputum examination and treatment. He condemns gargles for the ordinary patient, and thinks that in the use of the spray apparatus an india-rubber reservoir between the pump bulb and the bottle is very necessary to keep up constant pressure. The only right way to use the spray apparatus is for the patient to hold the mouth wide open, placing the spray nozzle just within the lips, and then take several deep inspirations while the spray is still actively issuing forth. This requires a continuous current. An exceedingly useful mixture for such a spray is one composed of tincture of benzoin, compound wine of ipecac (B. P.), and a 5 per cent. solution of cocain in equal parts. This properly used relieves the cough, breaks up irritable conditions in the larynx, and is very useful when nothing is to be seen and yet the patient complains of a tickling in the throat. The avoidance of changes of temperature is mentioned as valuable. In a useful cough which clears out the lungs, precautions need not be adopted. In definite phthisis with a useful cough he has found nothing so efficacious as 8 grains of iodid of potash; half a dram of syrup of tolu, and water up to half an ounce, used three times a day. In chronic subacute bronchitis he advises the avoidance of smoking or excessive talking, and thinks the cold morning bath better than any drug for those who are accustomed to it. In other cases when the chronic cough is troublesome he finds the iodid prescription useful, but more for adults than children. In the latter, belladonna does better work.

3. **Tuberculosis in the South of Ireland.**—Wynne points out the excess of tuberculosis in the South of Ireland as compared with other parts of Great Britain, and describes the insanitary conditions that exist which account for it, the unventilated dwellings, dirty habits, etc. The remedy lies in proper sanitation, including a more efficient control of the premises and cows of milk purveyors.

The Lancet, London.

May 28.

12 *Some Disorders of the Spleen. Frederick Taylor.
13 *Acute Infective Gangrenous Processes (Necroses) of the Alimentary Tract. Edred M. Corner.
14 *Surgical Treatment of Diseases of the Stomach from a Physician's Point of View. John Lindsay Steven.
15 Five Cases of Carcinoma of the Male Breast. Charles B. Keyser.
16 Case of Congenital Deficiency of Both Upper Limbs. H. Ashley Galtskell.
17 Three Cases of Suprarenal Apoplexy in Children. Frederick Langmead.
18 Further Note on Some Additional Points in Connection with Chloroformed Calf Vaccine. Alan R. Green.
19 Wound of the Left Thorax, with Extensive Laceration of the Pleura, etc. E. Wyndham Waters.
20 Gynecomastia. Edwin S. Crispin.

12. **Disorders of the Spleen.**—In this first lecture Taylor reviews the frequency of various lesions of the spleen, including capsulitis, perisplenitis and others due to various causes, chief among which are infectious and heart diseases. He mentions enlargement which seems to be frequent after typhoid, also in connection with leukemia, liver cirrhosis, etc., especially dwelling on infection as a cause of splenic enlargement. While some of the largest spleens are produced under conditions not proven to be infectious, such as leukemia, cirrhosis, etc., the most frequent causes are enteric fever, malaria, and endocarditis, with pneumonia and tuberculosis also following at a distance. New growths in the organ are comparatively rare. The following are recognized infectious diseases in which the spleen is known to be occasionally or constantly affected: Typhoid fever, relapsing fever, malaria with great constancy, measles and scarlet fever, variola, glandular fevers in more than half the cases, Malta fever always, diphtheria frequently, influenza, Weil's disease sometimes and pyemia. In anthrax it is generally larger than natural, and in acute dysentery it is full and soft. In chronic dysentery it is usually large, but sometimes small. In beri-beri it is increased in bulk and weight, but the influence of the failing circulation may operate here in part. In tubercle the organ often contains miliary or caseous nodules, but it is certainly enlarged sometimes. Congenital syphilis is probably responsible for many enlargements in infants. He has found little that is definite as to the implication of the spleen in rubella, varicella, mumps, whooping cough, cerebrospinal fever, sleeping sickness, early acquired syphilis, tetanus, rabies, glanders, foot and mouth disease, rheumatic fever, etc. Scheube states that it is occasionally enlarged in yellow fever. It appears to be little, if at all, enlarged in different kinds of poisoning. Landry's paralysis may be added to the list of infectious diseases and also pernicious anemia. Some of these causes are reviewed in detail and the article concludes with a report of a series of cases.

13. **Gangrenous Processes of the Alimentary tract.**—The third lecture of Corner treats of the bacteriology of acute infectious necrosis in which he finds pyogenic cocci more common in the acute than chronic form. The colon bacillus is by far the most abundant organism, occurring in 90 per cent. of the chronic cases and 70 per cent. of the acute, and associated with staphylococci in 15 per cent. of the acute cases, and with streptococci in 7 per cent. Staphylococci alone are rare; 1 per cent. in the chronic form and 4 per cent. in the acute. Streptococcus is exceedingly rare in the adult. He remarks that the colon bacillus is so common and so numerous that it must overcome other organisms and that, therefore, the earlier the case is examined the more likely are we to find complicating germs. It is doubtful if the cultures in all cases represent all the organisms that have been concerned in the dis-

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aster. The colon bacillus has some bad relations, but it is not always the rule that its action is an evil one. There is every reason not to expect other organisms in an ordinary culture, as they have been generally killed off by its growth. He finishes his paper with a notice of certain of the acute infective necroses in animals, pointing out that veterinary surgery seems to be in the stage that human surgery was twenty years ago. The idiopathic peritonitis of the latter has turned out to be mainly due to the appendix, and it remains for the future, he says, to see if those of the animal will find a similar explanation.

14. **Stomach Surgery.**—Steven is not a surgeon himself, but on a basis of 23 operations performed on his patients, affirms that with careful selection there are many stomach affections which can be benefited and successfully treated by surgery. But as regards malignant disease, he fears that the results of surgical interference will be mainly palliative. In cases of ruptured ulcer, of excessive hematemesis and of dilatation the operation may be confidently expected to be beneficial if done in time. Pylorectomy in malignant disease has, in his experience, always been fatal.

Journal of Tropical Medicine, London.

May 16.

21 Trypanosomiasis in Man. Guy R. Rusta.
22 Cold Weather Notes on Mosquitoes from the United Provinces, India. (Continued.) G. M. Giles.

Presse Médicale, Paris.

23 (I, No. 33.) *Nouveau dispositif pour stériliser le catgut à l'autoclave. Triollet. Abstract.
24 Céphalalgie d'origine oculaire. A. Tronsseau.
25 La prophylaxie du paludisme. A. Phillibert.
26 *La tuberculose et les filatures de laine. Vermersch. Abstract.
27 (No. 34.) La nature de l'appendicite. Etude de la distheses d'autoinfection. A. Gilbert and P. Lereboullet.
28 (No. 35.) *La névralgie occipitale dans les angines vulgaires. H. Vincent.
29 Physiologie du courant électrique. Ses propriétes. La résistance. A. Kimmoyra.
30 (No. 36.) *Athérome artériel et arterio-sclerose. O. Jousé.
31 Traitement des otites moyennes aigues. Lermoyez, Lubet-Barbon and Moure.
32 (No. 37.) *Rein flottant, hydronéphrose intermittente et crises d'entérite muco-membraneuse. Debove.
33 *L'acidose du sang et la pathogénie de la tuberculose pulmonaire. Canter. Abstract.
34 *Report of French Congress of Ophthalmology, 1904.

23. **New Mode of Sterilising Catgut.**—Steam has a disintegrating action on catgut and its effect is avoided by boiling the catgut in alcohol. The alcohol, however, takes up water and thus some steam is generated. Triollet believes that this difficulty can be avoided by using acetone in the place of the alcohol. The catgut needs the water after sterilization to restore its flexibility. This can be supplied without opening the air-tight jar. The catgut is wound on a small vial, which is then filled with water and placed, unstoppered, in a jar containing 10 c.c. of acetone. An air-tight metal cover is then screwed on the jar and the whole is heated for forty minutes at 120 C. The fumes of the boiling acetone hold the water down in the small vial, the pressure of the former being four atmospheres and a half and of the latter merely two atmospheres. The sterilization of the catgut proceeds, therefore, as if there were no water in the jar. After the jar and catgut are cooled again, the jar is turned upside down. The water runs out of the vial and diffuses through the acetone, and the work of softening commences. The catgut is ready for use in a few hours or days, according to its caliber.

26. **Hygiene of Textile Industries.**—Vermersch draws a gloomy picture of the conditions that prevail in the woolen spinning mills in France. The workmen engaged in spinning the wool have to work in a minimum temperature of 75 F., and it is generally 100 or above. The air has to be saturated with moisture in order to conduct away the electricity generated in the wool by the friction. In order to maintain the conditions favorable to the working of the wool, there is an almost total lack of ventilation. In some of the workrooms he found 9.3 per cent. of carbonic acid gas per 10,000, and 100,000 germs to the c.c. At the antituberculosis dispensary at Lille, 100 out of 519 applicants were employed in this industry.

28. **Occipital Neuralgia in Case of Sore Throat.**—Vincent has noted neuralgia following the course of the occipital nerve in 17 out of 136 cases of various forms of angina. He ascribes it to some abnormal communication between the pharyngeal nerve and the second posterior root of which the occipital nerve of Arnold is the direct prolongation. [He has since called attention to a slight, transient contraction of the pupil in cases of ordinary sore throat, stating that he has found it very pronounced and constant in more than one-fourth of all the cases in which the velum was particularly involved, especially in phlegmonous angina. He assumes that there must be some direct communication in certain individuals between Meckel's ganglion and the ophthalmic ganglion. Modifications of the pupil noted in infectious diseases, particularly in pneumonia, are due probably to some inhibiting or stimulating action on the cervical sympathetic or the meninges from the infectious virus. The discussion on this subject is reported in the *Bull. de la Soc. Méd. des Hop. de Paris*, May 28, 1904. —Ed.]

30. **Arterial Atheroma and Arteriosclerosis.**—Jousé does not accept any connection between atheroma and arteriosclerosis, but thinks that they are different entities. Small doses of adrenalin injected into the veins of rabbits induced atheroma in time, but nothing was ever observed in the experiments that suggested arteriosclerosis. He is inclined to think that the suprarenals are concerned in some way with the production of the atheroma. In 3 clinical cases of pronounced atheroma that came to necropsy he found evidences of extreme hyperfunction in the suprarenals, as he relates in detail.

32. **Combination of Intermittent Hydronephrosis and Enteritis.**—Debove cites instances similar to the case described, in which a floating kidney induced intermittent hydronephrosis and was the indirect cause of a mucomembranous intestinal affection. All the symptoms were cured by fixation of the abnormally movable kidney. This connection between the floating kidney and the mucomembranous enteritis has been fully established by the cures obtained by intervention on the kidney after failure of all known medical measures. Surgical interference is also indicated by the danger that the intermittent hydronephrosis may become continuous. Researches in his laboratory have demonstrated that when one kidney is in a condition of chronic hydronephrosis, the other kidney in time develops interstitial nephritis.

33. **Abnormal Acidity of Blood in Etiology of Tuberculosis.**—Canter asserts that he has found the standard of acidity of the blood in health to be between 450 and 550 acid units. In the tuberculous and especially in the pretuberculous stage, the acidity drops to 400. The lesser acidity seems to afford a more favorable culture medium for the tubercle bacillus. He suggests that treatment should aim to restore normal acidity to the blood, and in the pretuberculous stage should render the blood abnormally acid.

34a. **Visual Acuity in Relation to Working Capacity.**—This article was delivered as the principal address at the French Congress of Ophthalmology held in April at Paris. Sulzer emphasized the importance of adopting a uniform standard for determination of the visual acuity, which can be used by illiterate subjects and which will reveal simulation and aggravation. He proposes a scale based on a pure and simple visual impression, groups of black and white lines of equal width, and the Mellen figures. He also urged that the unit of sight should be the smallest measurable amount of visual acuity and multiples of this unit should represent the degree of visual acuity instead of the fractional figures now used. He proposes to adopt for this unit the visual angle of one degree and call it the Mellen unit. In regard to the working capacity he proclaimed that the permanent, partial incapacity resulting from the loss of an eye or reduction in visual acuity can not be accurately determined unless the limits of the professional visual acuity of the different industries and professions and their branches are known. Hence it is important to establish these limits without delay, examining large numbers of subjects representing each industry, trade and profession.

These examinations must be made with a standard scale and an illumination of at least ten candle meters.

34b. **Tardy Complications of Slight Injuries of the Eye.**—Dransart reported several cases of very serious lesions consecutive to slight contusions of the eyeball. The most insignificant traumatism may be followed by cataract, detachment of the retina, amblyopia without objective lesions, or atrophy of the optic nerve. Consequently the prognosis of contusions of the eyeball should be extremely guarded.

34c. **Vision in Deaf Mutes.**—Desjardins of Montreal stated that he had observed hypermetropia in 80 per cent. of 145 deaf mutes examined, with amblyopia in 53 per cent. In only one instance were the parents first cousins.

Revue de Gynécologie, Paris.

Last indexed page 502.

35 (VIII, No. 1.) *L'hystérectomie abdominale subtotale pour fibrome. Aperçu historique. Technique de M. le professeur Pozzi. F. Jayle.

36 *Deviation menstruelle et cloisonnement du vagina. De Sinety.

37 *Étude des collections purulentes de l'arrière-cavité des épiploons (rear cavity of omentum). G. Michel and G. Gross.

38 *Sarcome de l'arrière-cavité des épiploons avec considérations sur les tumeurs de l'arrière-cavité des épiploons. G. Gross and L. Sencert (Nancy).

35. **Subtotal Abdominal Hysterectomy.**—Jayle describes Pozzi's technic in performing this operation for fibroma. [Professor Pozzi, by the way, is the official delegate from the Paris Medical School to the Congress of French-speaking Physicians in America, to meet at Montreal, as already announced, June 28.—EDS.] Fifteen large cuts accompany the article, the last one showing how the stump of the cervix is sutured in two tiers. The lower part of the uterus is cut off in a point, which enables the lips of the wound in the stump to be more readily approximated. He uses a clamp to hold the broad ligaments, which has five long, sharp teeth along the lower blade, and a catch to lock the blades together. It is thus impossible for the ligament to slip out of the grasp of the forceps. He incises the ligament between two of these forceps.

36. **Menstrual Deviations.**—De Sinéty applies this term to the abnormal course of menstruation in a patient under observation. Puberty occurred with considerable commotion at the age of 12, with hemorrhages from the nose, vulva, anus and into the skin. Except for occasional irregular epistaxes there was no further intimation of menstruation until the age of 20. At this epoch vicarious menstruation through the rectum became regularly established. The vagina was walled off by a partition forming a cul-de-sac only 3 or 4 cm. deep.

37. **Purulent Collections in the Rear Cavity of the Omentum.**—Michel and Gross review the 43 cases published in the literature, and describe another personally observed. Puncture is dangerous, but incision and drainage usually cure. In the personal case described recovery was rapid after the laparotomy. Nothing was found to indicate the primary source of the pus pocket, but they assume that a very slow, chronic pancreatitis may have existed. Among other differential signs they mention that the stomach is always in front of the collection. The meteorism is more general in ileus than in case of pancreatitis. Exploratory puncture entailed fatal peritonitis in certain cases in which it was used.

38. **Sarcoma of Rear Cavity of Omentum.**—Tumors in this locality are very rare. Gross and Sencert were able to find only 4 cases in the literature, and all were teratomas, but they had occasion to operate for removal of a sarcoma in this region. The tumor was in a condition of cystic degeneration. This and the foregoing article form an elaborate monograph on the pathology of the rear cavity of the omenta.

Semaine Médicale, Paris.

39 (XXIV, No. 18.) Des chiasmas optique, acoustique et vestibulaire; uniformité fonctionnelle, normale et pathologique, des centres de la vue, de l'ouïe et de l'équilibre (of centers of sight, hearing and of balance). L. Bard (Geneva).

40 Report of German Congress of Internal Medicine, Leipsic, April 18-21, 1904. (Commenced in No. 17.)

41 (No. 19.) La lithiase comme cause de cirrhose hypertrophique biliaire. Debove.

42 (No. 20.) De la déviation, en sens opposé, de la tête et des yeux: paralysie d'un oculogyre et contracture du céphalogyre homonyme. J. Grasset (Montpellier).

42 *Procédé de circulation artificielle comme traitement prophylactique de la gangrène des membres. N. S. Isambert. Abstract.

43. **Artificial Circulation to Prevent Gangrene.**—Isambert was able to avert gangrene after ligature of the femoral artery on account of a traumatism. His prophylactic measure aimed to induce artificially a circulation through the parts by alternately expelling the blood and allowing it to rush back. He wound an elastic constricting bandage around the leg, and then removed it, repeating this procedure four or five times during the twenty-four hours. After each application the blood flowed into the limb much more copiously than before, showing that the paralytic vasodilatation caused a greater influx of blood than was possible before. He thinks that this mode of influencing the circulation has a wide scope of usefulness.

Centralblatt f. Chirurgie, Leipsic.

Last indexed page 1191.

44 (XXXI, No. 15.) *Die osteoplastische Symphysen-Resektion. O. Mans (Freiburg).

45 Beitrag zur Therapie der kongenitalen Hüftgelenksverrenkung. A. Welscher.

46 (No. 16.) *Behandlung der Lungen-Tuberkulose mit intrapulmonalen Injektionen von Iodoform-Glycerin. W. Gessner (Olvenstedt).

47 (No. 17.) *Zur Behandlung des chronischen Morbus Brightii durch Nephrolysis und Nephrokapsektomie. T. Rovsing (Copenhagen).

48 (No. 18.) *Operating Under Direct Inspection with X-Rays. Perthes (Leipsic).—Ueber Operationen unter unmittelbarer Leitung der Röntgenstrahlen.

49 Forceps for Operating on Digestive Tract. F. Hanay (Baden bei Wien).—Ueber Verwendung von Klemmen bei Operationen am Magen-Darm-Kanale.

50 Suggestion for Modification of Sauerbruch Air Chamber for Intrathoracal Operations. Wilms.—Kleine Vorschläge zu dem Sauerbruchschen Operationsraume.

51 (No. 19.) *Closure of Peritoneum in Radical Cure of Hernia. C. Hofmann (Cologne).—Zur Radikaloperation der Leistenhernien mittels der Peritoneal-Verschluss Methode.

52 Eine Modifikation der Syme'schen Amputation. A. V. Monbowitz (New York). Published in May Annals of Surgery.

53 *The Question of Gloves. A. Hammesfahr (Bonn).—Zur Handschuhfrage.

54 (No. 20.) *Zur Frage der intrathorakalen Operation des Esophagus. G. Kelling (Dresden).

55 Operating Table. L. Moszkowicz (Vienna).—Operationstisch mit einfacher Hebevorrichtung.

56 *Zur Technik der Operationen im Thorax mit Ueberdruck (with plus pressure). Wilms.

44. **Osteoplastic Resection of Symphysis for Access to Pelvis.**—The immense difficulties encountered in the extirpation of a malignant tumor of the bladder by Kraske, notwithstanding that he worked through both abdomen and vagina, impelled Manz, his assistant, to devise some easier means of access. He thinks he has accomplished this by the technic described and illustrated. A six-sided flap is cut in the symphysis pubis, two of the sides being formed by the top and bottom of the symphysis proper, and the other four sides being sawed with the Gigli saw through the pubic bones in the shape of a right angle on each side, the point of the angle touching the nearest point of the obturator foramen on each side. The side of the flap formed by the top of the symphysis proper is nearly four times as wide as the side formed by the bottom of the symphysis. The osteoplastic flap is turned back upward, and the access afforded to the parts below is surprisingly capacious, as the advantages of the space in the obturator foramina are gained. He has not tried this technic on the living subject, but is convinced that it will prove a great advance in the technic of operations on the pelvic organs, including the rectum and the female genitalia.

46. **Injections of Iodoformed Glycerin into the Lung Tissue.**—Gessner urges that pulmonary tuberculosis in its early stages should be regarded as a surgical disease and treated accordingly. The established principles of surgical treatment of a tuberculous lesion, that is, strict repose for four to six weeks and injection of 5 gm. of iodoformed glycerin at ten to fourteen days' interval, should be applied to the early stages of an acute tuberculous lesion in the lung as well as to those elsewhere. He gives the particulars of 7 cases thus treated. The results emphasize the value of this extension of surgical treatment to the lungs. He injects the fluid from the back into the apex of the superior lobe, two or three finger-breadths from the spinous process of the first or second thoracic vertebræ, the patient sitting up, the head bent forward, the spot of the

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injection previously anesthetized with ethyl chlorid. The syringe is held at an angle of forty-five degrees from the horizontal, and the needle is slowly worked through the first interspace into the parenchyma of the lung. He inserts the needle in such a way as to make the injection in the cortical layer of the lung, toward the periphery, thus avoiding the larger vessels. For the lower lobe he inserts it in the sixth interspace. There has been no mishap in his experience to date. The more recent the infection the more striking the therapeutic results. The patient feels pain in the arm as the fluid is ejected, but there is no coughing. Once he found that he had made the injection into a cavity and the fluid was coughed up.

47. **Surgical Treatment of Bright's Disease.**—Rovsing epitomizes the conclusions of his experience in the statement that true Bright's disease is a contraindication to surgical intervention on the kidneys. By this he means diffuse, bilateral and non-infectious nephritis. He admits, however, that the surgeon may be forced to act even in this case by severe pains. On the other hand, unilateral or partial nephritis and perinephritis of infectious, traumatic or uratic origin may be relieved or cured by operative intervention. "How many patients," he exclaims, "have been supposed to be victims of Bright's disease on account of the finding of albumin in the urine, when in reality they belonged to the other category, and might have been saved by surgical intervention if the opportune moment had not been lost." Systematic microscopic and bacteriologic examination should be made in every case of albuminuria both of the urine from the bladder, and, if possible, of that from the ureters. Physicians should learn to catheterize the ureters. Co-operation between the physician and surgeon is needed here more than almost anywhere else, and physicians should not be frightened away from benefiting by the progress realized in this line during the last ten years by such exaggerated statements as that every case of nephritis should be treated surgically.

48. **Operating with X-ray Light.**—Perthes gives illustrations of an operating table for minor operations on the hands or arms, especially for extraction of broken needles. There are three pedals below. With the first pedal the operator can lower automatically the fluorescent screen which is horizontal, parallel to the table, and adjustable in a standard. With the second pedal he can turn on the electric current to start the vacuum tube into action, and with the third pedal he turns off the electric light illuminating the room. He can then inspect the field of operation through the interposed fluorescent screen and continue his operation with this aid, or by a touch to the pedals restore conditions as they were before, without the use of his hands. The table could easily be modified to adapt it to use for the legs or hip joint, reduction of fractures, etc.

51. **Radical Cure of Inguinal Hernia by Closure of Peritoneum.**—Hofmann's experience has confirmed the great advantages of his "peritoneal-verschluss" method of obliterating the hernial sac. He aims to reconstitute the depression of the peritoneum between the plica urachi and the plica hypogastrica—the so-called internal inguinal fossa—in the place of the funnel-shaped opening leading to the hernial sac. He accomplishes this by exposing the hernial sac up to the parietal peritoneum, and at the point where the neck blends into the parietal peritoneum he applies a tobacco-pouch suture after opening and slitting the hernial sac. After it is slit, it is pulled well out with forceps, tied off and excised. The parietal peritoneum then spreads out flat with merely a small button protruding opposite the inguinal ring. When the patient coughs there is no longer any funnel-shaped protrusion. The operation is then completed as usual, the aim being merely to supply a support for the closure in the peritoneum within, as the hernia *per se* is obliterated. It is not necessary afterward to construct a canal for the spermatic cord, as this takes care of itself. He prefers a wire supporting suture and states that in 100 cases in which Witzel's wire suture technic has been followed there has been no suppuration and nothing has ever been noted to indicate that the wire must be removed. It heals smoothly in place, answers its purpose, and does not incommode in any way. No truss is required after the operation. The slight protrusion normally observed during straining and coughing is even slighter on the operated side than on the other.

53. **The Glove Question.**—Hammesfahr uses gloves or not ("hand shoes," the Germans call them), guided by the circumstances of the various phases of the operation. He draws on Isle thread gloves, previously lying in salt solution, when he comes to the point of tying the suture threads or ligatures. By this means he is sure of asepsis, while his grasp of the suture material is much firmer. He remarks in parenthesis that Claudius' method of sterilizing catgut is actually realizing all and more than he claims for it.

54. **Operations on Esophagus.**—Kelling has been making a study of this subject for the last few years and recapitulates here some of his conclusions. Attempts at prothesis have not been very successful. In tamponing the conditions are the reverse of what usually prevails, and drainage must be by aspiration. The application of the Sauerbruch air-chamber may prove a progress in the technic of after-treatment as well as of intrathoracal operating. His previous communication on this subject was in the *Centralblatt*, No. 4.

55. **Intrathoracal Operating with Plus Pressure.**—Wilms describes a means of remedying the disadvantages of tracheotomy under the Brauer technic of hyperpressure. He slips a condom over the canula and as the pressure within the lungs increases, the condom inflates and closes the trachea air-tight.

Zeitschrift f. Krebsforschung, Jena.

Last indexed page 885.

57 (I, No. 4.) *Weitere Untersuchungen zur Frage der Krebs-Parasiten (cancer parasites). K. von Leyden.

58 *From What Complications Do Cancer Subjects Die? M. Simmonds (Hamburg).—An welchen Komplikationen sterben Krebskranke?

59 Fall von primärem Nierencarcinom (carcinoma of kidney). A. Hofmann.

60 Opening of Cancer Hospital at Moscow. Illustrated.

57. **Parasitic Origin of Cancer.**—Several colored plates show the details of the bodies which von Leyden assumes to be the living organisms responsible for the etiology of cancer. He presents a number of arguments in favor of this view, insisting especially on the fact that certain localities, such as the prisons in Luckau and Brandenburg, are absolutely immune to cancer. The negroes of Central Africa also seem to be comparatively immune. He quotes statistics from this country to show that cancer was at first unknown among negroes here, but has become frequent in late years. Also that cancer is more prevalent among our German than among our English population, and more prevalent the more crowded the population. He also comments on the fact that in animals the parts most frequently affected with cancer are those where foreign bodies are most liable to find lodgment, as in the eyes.

58. **The Fatal Complications of Cancer.**—Simmonds undertook to determine the direct cause of death in postmortem examination of 700 cancer subjects. One-third succumbed to the immediate effects of the cancer; another third to complications directly connected with it; 30 per cent. to complications remotely connected with it, and 4 per cent. to intercurrent disease having no apparent relation with the cancer.

Riforma Medica, Palermo and Naples.

Last indexed page 1282.

61 (XX, No. 9.) Pseudo-Cirrhosis of Liver from Pericarditic Adhesions. F. Schupfer (Bacelli's clinic, Rome).—Sulla cosiddetta pseudo-cirrosi pericarditica del fegato.

62 *Caso di tifemia senza reazione di Grüber-Widal. C. Battigiani.

63 *Risultati sperimentali di un nuovo processo per le anastomosi intestinali ecettiche. G. Pariavecchio. Abstract.

64 *Sulle febbri di origine nascosta (fevers of unknown origin). C. Nonnolo. Abstract.

65 (No. 10.) Blood Serum in Uremia and Anuria. A. Rossi (Maragliano's clinic, Genoa).—Ricerche chimiche e chimico-fisiche sul siero di sangue in alcuni casi di uremia e di anuria sperimentale.

66 Alcune ricerche sulla flora batterica delle glandole salivari. P. L. Pizzoni.

67 *Nuova sonda uterina per la puntura delle membrane fetali. A. Lizzati (Ferrandina).

68 Atropine ed occlusione intestinale. C. Mastri.

69 (No. 11.) *Sulla gangrena gazosa. F. Jacobelli (D'Antona's clinic, Naples).

70 Increased Elimination of Carbonates in Pseudo-Phosphaturia. A. Campani.—Sulla maggiore eliminabilità dei composti ammoniacali e sulla maggior eliminazione dei carbonati nella pseudofosfaturia terrosa.

71 *Contributo al riconoscimento microchimico della strichnina in tossicologia. F. Penzo (Messina).

62. Typhemia Without Agglutination.—The clinical and bacteriologic findings proclaimed that the case described was a typical typhoid with typhoid bacilli in the blood, but the Widal test was negative. Battigazzi is inclined to think that the lack of agglutination in this instance may have been due to unusual virulence of the germ. [In this connection we call attention to Wolf's announcement that the agglutination test is much facilitated by previously warming the cultures to 122 or 131 F., as mentioned on page 1413.—Ed.]

63. New Mode of Side-to-Side Anastomosis.—Parlavecchio's communication was published originally in the *Policlinico*, No. 7, 1904. His technic consists in suturing the loops or organs together before opening, and making the opening between them by drawing a wire guitar string back and forth to cut the tissues. The rear row of sutures is taken first, then the thread is passed through from side to side of the proposed opening, the needle 8 cm. long, shaped like a fishhook. Then the front row of sutures is taken. The wire is then tied to the end of the thread and drawn through, and the tissues cut by sawing the wire back and forth, after which it is withdrawn.

64. Fevers of Unknown Origin.—Bozzolo discusses the fevers induced by the toxins of bacteria lurking ignored somewhere in the system. In a case described a high fever of sudden onset with chills, enlarged spleen, considerable anemia and albuminuria was not influenced by quinin nor mercury. No bacteria could be found in the blood, but the necropsy revealed an ulcerative endocarditis at the right auriculo-ventricular opening. The slight systolic soufle noted at the apex during life had been interpreted as due to the anemia and fever, there being no signs of mitral or tricuspid incompetency. The first symptoms had been noted in September and the patient succumbed in the following February. Another class of cases are those of what he calls the pre-cancer fever. It differs from the fever observed during the course of a recognized cancer as the latter is generally due to mixed infection. A number of Italian clinicians have observed cases of a slight protracted fever in old syphilitics, probably due to the localization of the process in some deep inaccessible organ. Mya has noticed that the children of syphilitic parents are particularly prone to fever on trivial causes. The irregularity of nervous or hysteric fevers is their most striking characteristic. Another group of fevers includes the cases of septicemia without localization or with tardy localization. The same germs may induce lesions in various organs or may induce a general infection without localizations, although the blood may be swarming with bacteria. Their products may cause more serious damage to organs and tissues than the presence of the bacteria themselves. This is especially true of the tetragenus, staphylococcus, streptococcus, and gonococcus, but is less liable with the proteus and still less with the colon group.

67. Uterus Sound for Perforating Membranes.—A small knife springs out of a sheath at the tip of the sound in the little instrument devised by Lisanti.

69. Gaseous Gangrena.—Jacobelli found the *Bacillus septicus cerebicus* in 2 cases of gaseous gangrene. He does not believe that this lesion is the work of any specific micro-organism. The bacilli he found do not produce gas in media containing sugar. Guinea-pigs inoculated with them died within twenty-four hours, with a developing focus of gangrene, but no formation of gas.

71. Microchemistry of Strychnin.—When strychnin poisoning is suspected the presence of the poison may be revealed by the technic which Penzo describes. If the dose was .05 gm. characteristic crystals are obtained, and even with as little as .01 gm. the drug responds to the usual color tests for strychnin. The stomach is tied at both ends, and after removal from the cadaver is incised along the convex margin. The content and rinsings of the mucosa are diluted and filtered until perfectly clear. About 2 c.c. of the filtrate are evaporated to a syrup, diluted with alcohol, filtered and again evaporated. The residuum is diluted with distilled water containing a little ammonia to render the fluid strongly alkaline. The mixture is then shaken up with 2 c.c. of chloroform, and is then set aside in a separator. A few drops of the clear chloroform part of the mixture are evaporated on slides, when the strychnin crystals form, and are easily recognized. If the proportion of strychnin is too small for this, the color tests may still give a positive response. The microscope is not necessary for the color tests. His experiments were conducted on dogs, and a single drop of the final mixture never failed to show the strychnin crystals after the animal had ingested 5 eg. of strychnin, or even as little as 1 eg. Putrefaction does not interfere with the results of the test, nor the presence of food in the stomach. The stomach of one dog that had been killed with a dose of 10 eg. of strychnin was kept for two weeks exposed to the air without preservatives, merely tied at both ends. The tests can be still further simplified by shaking up with chloroform 2 c.c. of the filtered diluted stomach content after the addition of a little ammonia to render it alkaline. The resulting fluid is very turbid, but enough clear fluid can be obtained from the bottom of the separator or by centrifugalization to answer for the microchemical test.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to them sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISEASES OF METABOLISM AND NUTRITION. By Prof. Carl von Noorden, Physician-in-Chief to the City Hospital, Frankfort, a. M. Authorized American Edition Translated under the Direction of Boardman Reed, M.D., Professor of Diseases of the Gastro-intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College. Part V. Concerning the Effects of Saline Waters (Ekkaringer, Homburg) on Metabolism. By Prof. Carl von Noorden, Frankfort, and Dr. Carl Dapper, Bad Ems. Cloth. Pp. 92. Price, 75 cents. New York: E. B. Treat & Co. 1904.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Issued Monthly. Under the General Editorial Charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School. Volume V. Obstetrics. Edited by Joseph B. De Lee, M.D., Professor of Obstetrics, Northwestern University Medical School. April, 1904. Cloth. Pp. 238. Chicago: The Year Book Publishers.

DISEASES OF THE INTESTINES AND PERITONEUM. By Dr. Hermann Nothnagel of Vienna. The Entire Volume Edited, with Additions, by Humphrey D. Rolleston, M.D., F.R.C.P., Physician to St. Georges Hospital, London, England. Cloth. Pp. 1062. Fully Illustrated. Price, $6.00 net. Philadelphia, New York, London: W. B. Saunders & Co. 1904.

THE OPHTHALMIC YEAR-BOOK. A Digest of the Literature of Ophthalmology with Index of Publications for the Year 1903. By Edward Jackson, A.M., M.D., Emeritus Professor of Diseases of the Eye in the Philadelphia Polyclinic. With Forty-five Illustrations. Cloth. Pp. 250. Denver, Colo.: The Herrick Book and Stationery Company. 1904.

TUBERCULOSIS AND ACUTE GENERAL MILIARY TUBERCULOSIS. By Dr. G. Cornet of Berlin. Edited, with Additions, by Walter H. James, M.D., Professor of the Practice of Medicine in the College of Physicians and Surgeons (Columbia University), New York. Pp. 502. Price, $6.00 net. Philadelphia, New York, London: W. B. Saunders & Co. 1904.

OBSTETRIC AND GYNECOLOGIC NURSING. By Edward P. Davis, A.M., M.D., Professor of Obstetrics in the Jefferson Medical College and in the Philadelphia Polyclinic. Fully Illustrated. Second Edition, Thoroughly Revised, Polished Doctrum. Pp. 402. Price, $1.75 net. Philadelphia, New York, London: W. B. Saunders & Co. 1904.

ELECTRO-DIAGNOSIS AND ELECTRO-THERAPEUTICS. By Dr. Toby Cohn, Nerve Specialist of Berlin. Translated from the Second German Edition and Edited by Francis A. Sovatchky, M.D., of New York. With Eight Plates and Thirty-nine Illustrations. Cloth. Pp., 220. Price, $2.00. New York and London: Funk & Wagnalls.

EPILEPSY AND ITS TREATMENT. By William P. Spratling, M.D., Superintendent of the Craig Colony for Epileptics at Sonyea, N. Y. Illustrated. Cloth. Pp. 322. Price, $4.00 net. Philadelphia, New York, London: W. B. Saunders & Co. 1904.

TRANSACTIONS OF THE AMERICAN PEDIATRIC SOCIETY. Fifteenth Session Held at Washington, D. C., May 13-14, 1903. Edited by Walter Lester Carr, M.D. Cloth. Pp. 294. Reprinted from the Archives of Pediatrics. 1903.

ANNUAL REPORT OF THE CINCINNATI HOSPITAL to the Mayor of Cincinnati for the Fiscal Year Ending Dec. 31, 1903. John Fehrenbatch, Supt. Paper. Pp. 64. Cincinnati: The Commercial-Gazette Job Rooms Print. 1904.

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